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EDWARDS'S BOTANICAL REGISTER:

OR,

ORNAMENTAL FLOWER-GARDEN AND SHRUBBERY:

CONSISTING OF

COLOURED FIGURES OF PLANTS AND SHRUBS,

CULTIVATED IN BRITISH GARDENS;

ACCOMPANIED BY THEIR

History, Best Method of Treatment in Cultivation, Propagation, &c.

CONTINUED

BY JOHN LINDLEY, Ph. D. F.R.S. AND L.S.
PROFESSOR OF BOTANY IN UNIVERSITY COLLEGE, LONDON,
AND THE ROYAL INSTITUTION OF GREAT BRITAIN,
&c. &c. &c.

New Series.

VOL. X.

OR VOL. XXIII. OF THE ENTIRE WORK.

——viret semper——nec fronde caducâ
Carpitur.

LONDON:
JAMES RIDGWAY AND SONS, PICCADILLY.

MDCCC.XXXVII.

MISSOURI
BOTANICAL
GARDEN

ADDRESS

TO THE

SUBSCRIBERS TO THE BOTANICAL REGISTER.

THE great and constantly increasing importation of new and curious Plants into this country, renders it necessary for the Proprietors of the BOTANICAL REGISTER to make an exertion to keep pace with the spirit of the times; and finding, on the one hand, the present limited number of Descriptions in each Number (eight), by no means sufficiently extensive for a record of the rare and beautiful Plants, submitted to their notice; and on the other hand, feeling anxious to diminish rather than increase the expense of the work, Dr. Lindley has suggested the plan of increasing the number of Descriptions as much as possible, and instead of giving a Figure to every Description, as formerly, to figure such only as force themselves upon the attention of the Botanist or Amateur, either by their surpassing beauty, or some rare and curious quality; adding also a sufficient quantity of letter-press to embrace, under the title of "Botanical and Horticultural News," a Monthly Register of the most rare and interesting matter relating to those subjects. It is also proposed, in all cases, to give precise directions for the cultivation of the Plants that may be introduced into the work. This arrangement cannot but add greatly to the labour of Dr. Lindley, who, nevertheless, always anxious to promote the extension of scientific knowledge, will not allow any personal consideration to stand in the way of so desirable an end.

In the confident hope of the increased patronage of the Botanical Public to the plan, the Proprietors have determined to reduce the price of all future numbers, beginning with January the 1st, to 3*s.* 6*d.* instead of 4*s.* which will render the Botanical Register the cheapest, as it is the most beautiful, of all the Botanical Periodicals; and eventually constitute it the completest and most authentic illustrated Catalogue of Plants, in the whole World.

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OF

VOL. XXIII.

OR

VOL. X. OF THE NEW SERIES.

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Miss Drake del.   Pub by J Ridgway 169 Piccadilly Jan 1 1837   S. Watts sc.

* ONCÍDIUM críspum.

Curled-flowered Oncidium.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ, § VANDEÆ.

ONCIDIUM. *Suprà, vol.* 13. *fol.* 1050.

A § 1. *a.* * Gen. et Sp. Orch. 197.

O. *crispum;* pseudobulbis oblongis sulcatis rugosis diphyllis, foliis lanceolatis coriaceis acutis, scapo simplici multifloro, sepalis (obovatis) recurvis undulatis obtusis lateralibus semiconnatis, petalis duplò majoribus subrotundis undulatis unguiculatis, labelli lobis lateralibus cornuformibus recurvis nanis intermedio maximo unguiculato subrotundo cordato undulato, cristâ subhastatâ acuminatâ tuberculis subuniserialibus circumdatâ, columnæ alis rotundatis denticulatis carnosis.

O. crispum. *Lodd. Bot. cab. t.* 1854. *Gen. et Sp. Orch.* 197. *Hooker in Bot. Mag. t.* 3499.

The first notice I had of the existence of this species was the finding, in the Herbarium of Sir William Hooker, a drawing and one single dried flower of it, which had been sent from the Organ Mountains in Brazil, with a memorandum that from fifty to sixty flowers frequently grow on a stalk. A small specimen of it shortly after flowered with Messrs. Loddiges, and it has subsequently blossomed in many collections, but never with the vigour that it possesses in its wild state.

Even as we know it, it is a stately, noble looking object, with its very large deep chesnut flowers; but if it can be brought to its full degree of vigour, we shall have little in its tribe that can vie with it in appearance.

The plant that furnished the accompanying drawing grew in the hothouse of Richard Harrison, Esq., Liverpool, in May 1836.

The genus Oncidium is one of the most distinct in the whole of the extensive natural order to which it belongs, and in general it is easily enough determined; but even here, as in all such cases, there are species that do not exactly belong to it, or to any other genus. Some instances of these I shall give in the next number of the Register; for the present I confine myself to the genuine and certain species. These, which abound in the tropical parts of America, extend also so far into colder regions, that one species, O. nubigenum, occurs on the mountains of Peru, at the height of 14,000 feet above the sea, where the air must nearly freeze. A large number of them occur in our gardens; of these many are among the older inhabitants of stoves, others are of such recent introduction as hardly yet to be known even by name; among the last are more particularly to be named the lovely rose-coloured *O. ornithorhynchum* from Mexico, and a beautiful little species, *O. lunatum,* a native of Demerara. The genus Oncidium will not however be seen in all its glory till we possess O. tigrinum from Mexico, O. pictum from Peru, and O. macranthum from Guayaquil. The first and last of these equal O. crispum in the size of their flowers; the other is probably the finest of the yellow species.

I am acquainted with the following in addition to those already published.

A. § 1. *a.* *

1. O. *maculosum;* pseudobulbis ovalibus compressis, foliis lanceolatis acutis, scapo stricto maculoso apice paniculato, sepalis ovalibus acutis reflexis lateralibus basi connatis, petalis oblongis obtusis, labello maximo basi pubescente obsolete quadrilobo reniformi: laciniis lateralibus minimis auriculæformibus, cristâ oblongâ e tuberculis pluribus digitiformibus constante, columnæ alis inferioribus truncatis superioribus falcatis integerrimis majoribus.——Brazil, von Martius.——A fine species in the way of Oncidium bifolium.
2. O. *varicosum;* pseudobulbis oblongis subtetragonis diphyllis, foliis rigidis spathulato-lanceolatis scapo gracili pyramidali subsimpliciter racemoso ter brevioribus, floribus

* See folio 1542.

distantibus, petalis sepalisque quorum lateralia semiconnata acutis reflexis, labello maximo subrotundo obsoletè quadrilobo: lobis lateralibus rotundatis, cristâ posticè tridentatâ fornicatâ anticè cuneatâ varicibus venarum in posticis confluentibus circumdatâ, alis superioribus columnæ rotundatis denticulatis inferioribus integerrimis. ——Brazil, Prince Maximilian of Wied Neuwied.——A very fine species in the way of O. bifolium, but with large spreading compound racemes.

3. O. *isopterum*; pseudobulbis ovalibus compressis diphyllis, foliis angustis canaliculatis recurvis scapo apice paniculato flexuoso quadruplò brevioribus, sepalis acutis supremo fornicato lateralibus semiconnatis divaricatis, petalis obovatis reflexis, labelli laciniis lateralibus brevibus angustis obtusis intermediâ transversâ angulatâ bilobâ, cristâ tuberculosâ, columnæ alis 4 subæqualibus rotundatis.——Brazil, Von Martius.——A small species very near O. flexuosum.

A. § 1. *b.* *

4. O. *Martianum*; pseudobulbis, ... foliis ...., scapo erecto paniculato, sepalo supremo petalisque obovatis obtusis concavis lateralibus linearibus acutis brevioribus, labello bilobo reniformi: laciniis lateralibus rotundatis nanis, cristâ falcatâ compressâ utrinque tuberculis 3 linearibus ? suffultâ, alis columnæ denticulatis subquadratis angulis rotundatis.——In Brazil, von Martius.——A beautiful yellow species, with a scape two feet high; it resembles in general appearance O. ampliatum.

5. O. *lunatum*; pseudobulbis oblongis compressis 1-2-phyllis, foliis angustè oblongis planis obtusis scapo brevioribus, scapo racemoso, sepalis petalisque spathulatis retusis, labello pubescente lunato basi piloso: laciniis lateralibus minimis inflexis, cristâ lineari apice depressâ utrinque bidentatâ: dentibus glanduligeris, alis columnæ cuneatis integris, clinandrio posticè dentato.——A pretty little species, with a white crescent-shaped lip, blotched with dull orange, and white sepals blotched with deep orange.——Messrs. Loddiges imported this plant from Demerara. It will be figured in the Botanical Register, folio 1929.

6. O. *retusum*; pseudobulbis ...., foliis lineari-lanceolatis, scapo paniculato divaricato, sepalis petalisque subæqualibus spathulatis retusis subcarnosis, labelli lobo medio reniformi bilobo lateralibus paulò majore, cristâ e lamellis 5 brevibus tuberculos 6 elongatos circumdantibus, columnæ alis maximis acinaciformibus dentatis.——Peru, Mathews in herb. Hooker.——A beautiful species with deep chesnut and yellow flowers, and a yellow lip. Its mode of growth is that of O. Baueri.

7. O. *gracile*; pseudobulbis ovatis compressis diphyllis, foliis lanceolatis acutis brevibus, scapo gracili apice racemoso 3-6-floro, sepalis lineari-lanceolatis, petalis paulò latioribus, labello cuneato emarginato basi auriculato lamellis duabus linearibus cristato, columnæ alis oblongis integris.——Brazil, von Martius.——The scape of this species is about a foot high, with from 3 to 6 rather small flowers at the end. The leaves are not more than two inches long, and the pseudobulbs about ⅓rd that length. The lip is yellow, the remainder of the flower reddish brown and green.

8. O. *ramosum*; pseudobulbis ...., foliis ...., paniculâ strictâ densâ ramosâ, sepalis angustis acutis supremo erecto fornicato lateralibus unguiculatis angustioribus, petalis oblongis subundulatis, labello subrotundo bilobo basi auriculato, cristâ digitato-tuberculatâ squamis ? carnosis interjectis, columnæ alis rotundis integerrimis.——Brazil, von Martius.——Scape a foot and half long, much branched, very compact, not at all flexuose. Flowers extremely numerous, yellow and olive, rather smaller than those of O. altissimum. A beautiful species.

9. O. *leucochilum* (Bateman in litt.); foliis .... pseudobulbis ...., scapo elato paniculato, sepalis petalisque oblongis obtusis subæqualibus patentissimis, labello reniformi altè bilobo utrinque emarginato: laciniis lateralibus retusis nanis, cristâ 3-corni basi utrinque dentatâ, columnæ alis acinaciformibus dentatis.——Mexico, Mr. Bateman. ——A noble species with the habit and stature of Oncidium Baueri. Flowers greenish, banded with crimson; lip pure white.

10. O. *reflexum*; pseudobulbis ovatis monophyllis, foliis angustè lanceolatis acutis, racemis subcompositis longissimis pendulis multifloris, sepalis petalisque lineari-lanceolatis undulatis acutis reflexis, labello reniformi emarginato: laciniis lateralibus rotundatis dilatatis planis, cristâ depressâ tridentatâ apice bicorni, columnæ alis falcatis dentatis.——Mexico, Count Karwinski.——A beautiful species related to O. altissimum; there are specimens in the Royal Bavarian Museum, now in my care, and the species is cultivated by Messrs. Loddiges. I mistook a specimen of this plant, preserved in Mr. Lambert's Herbarium, for O. funereum of La Llave, but that species, having lenticular *depressed* pseudobulbs, must be different.

A. § 1. *b.* **

11. O. *raniferum*; pseudobulbis ovatis sulcatis diphyllis, foliis lato-linearibus acutis scapo paniculato brevioribus, sepalis petalisque oblongis acutis patulis, labelli laciniis lateralibus triangularibus intermediâ cuneatâ emarginata, cristâ depressâ medio constrictâ: dimidiâ posteriore quadratâ basi utrinque callosâ medio tuberculatâ anteriore triangulari apice emarginata utrinque foveatâ, alis columnæ integris.——Brazil. ——A small yellow-flowered species, with the lower half of the lip chesnut coloured; it exists in Mr. Knight's collection.

A. § 1. *b.* ***

12. O. *deltoideum*; pseudobulbis angustis angulatis, foliis lanceolatis canaliculatis, scapo paniculato ramis multifloris flexuosis divaricato, sepalo supremo unguiculato obovato lateralibus longioribus spathulato-lanceolatis, petalis latioribus obovatis crispis, labello deltoideo angulis rotundatis, cristâ basi tuberculatâ apice trilamellatâ, columnæ alis maximis acinaciformibus dentatis.——Peru, Mathews.——A remarkable species, with somewhat the habit of a dense-flowered O. altissimum.

Miss Drake del.

Pub by J. Ridgway. 169 Piccadilly. Jan. 1. 1837.

S. Watts sc.

* TRITELÉIA uniflóra.

One-flowered Tritelia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ, § SCILLEÆ.
TRITELEIA. *Suprà, fol.* 1685.

T. *uniflora;* foliis linearibus scapo (pedali) debili subæqualibus, involucro vaginante apice bifido pedunculo filiformi duplò breviore, umbellâ 1-florâ, staminibus superioribus infra faucem ortis. *Lindl. in Bot. Reg. sub folio* 1293.

Rather a pretty bulbous plant, native of Mendoza, where it was originally found by Dr. Gillies. Its flowers have a delicate sky-blue tinge, but unfortunately the plant smells powerfully of garlic.

It will be easily cultivated in a frame, or even in an open border, kept dry in winter.

The specimen was communicated by Messrs. Lowe and Co. of Clapton, in June 1836.

The manner in which the anthers are attached to the filament, and the sessile ovary of this species, are at variance with the characters of the genuine Triteleias, but in the absence of any additional species, it will be most advisable to leave it undisturbed in the genus where it at present stands.

* See fol. 1685.

Miss Drake del.

S. Watts sc

Pub by J. Ridgway 169 Piccadilly Jan 1. 1837

RÓSA sínica.

Three-leaved China Rose.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ.
ROSA. *Suprà, vol.* 1. *fol.* 53.

R. *sinica;* stipulis setaceis deciduis, petiolis costâque aculeatis, fructibus muricatis. *Lindl. Monogr. Ros. p.* 126. *t.* 16.
R. sinica. *Aiton. Hort. Kew. ed. ult.* 3. 261. non Linn.
R. trifoliata. *Bosc.*
R. ternata. *Poiret.*
R. cherokeensis. *Donn.*
R. nivea. *De Cand. Hort. Monsp.* 137. *Prodr.* 2. 599.
R. hystrix. *Lindl. Monogr.* 129. *t.* 17.
R. lævigata. *Michaux Fl. Bor. am.* 1. 295.

A very common climbing Rose in the gardens of Italy and the South of France, where it is highly ornamental, from the profusion of its snow-white flowers, and the handsome shining appearance of its evergreen leaves.

It is less suited to this climate, in consequence of being rather tender; I have seen it however in great beauty trained to a south wall: and it was from a similar situation, in the Nursery of Messrs. Whitley and Osborn of Fulham, that the specimen now figured was obtained in May 1835.

It is a native of China, where it appears to be the common Dog Rose of the country. Now that the races of cultivated Roses have become so much improved by hybrid intermixture, it is well worth ascertaining how far this is suited to alter the foliage and size of blossoms of some of

the other Chinese species. What would be most to be feared is, that its delicate constitution should be communicated to its offspring; but this might be avoided by mixing it with some very hardy species, and then using the variety so obtained as the subject of a second intermixture. There is so much beauty in the foliage, and such remarkable firmness, combined with delicacy, in the petals of R. sinica, as to make it highly deserving of a trial.

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* TRIGONÍDIUM obtúsum.

Blunt-petalled Trigonidium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ, § VANDEÆ.

TRIGONIDIUM. *Sepala* æqualia, semiherbacea, in cyathum trigonum isoscelem cohærentia, apice patula. *Petala* corollina, duplo minora, venosa. *Labellum* nanum, trilobum, cum columnâ articulatum, medio carnosum. *Columna* nana, libera, semiteres. *Anthera* unilocularis. *Pollinia* 4, cohærentia, minoribus dorsalibus, in glandulam triangularem stigma parvum triangulare tegentem insidentia.——Herbæ *epiphytæ, Americanæ,* rhizomate *repente florifero! et pseudobulbifero.* Folia *coriacea.* Pedunculi *erecti, uniflori, vaginati.*

T. *obtusum;* foliis lineari-lanceolatis, vaginis acutis, sepalis obovatis, petalis obtusis, labello dorso tuberculato, anthera glanduloso-pilosâ.

Pseudobulbi *compressi, oblongi, obsoletè striati, in plantâ spontaneâ per duas uncias distantes, in rhizoma scapos plurimos promens insidentes.* Folia *cuique pseudobulbo duo, angustè lanceolata, pedalia, sesquiunciam lata, ferè enervia.* Bateman in litt. Pedunculi *palmares, erecti, foliis breviores;* vaginis 5, *convolutis, acutis, pedunculo appressis, superiore ovario breviore.* Sepala *obovata, obtusa, basi quasi agglutinata in cyathum trigonum petalorum longitudine, luteo viridia, versus apicem fuscescentia.* Petala *alba, apice aurantiaco-fusca et callosa, venis purpureis ornata.* Labellum *petalis plus quam duplò brevius, trilobum, axi et lobo medio carnosis, infra apicem extùs tuberculatum.* Anthera *glandulis piliformibus cristata, 1-locularis.*

For the opportunity of publishing this curious plant I am indebted to Mr. Bateman, who sent it me in August 1836, with the following note:—

"This singular plant I owe to the exertions of Mr. Colley in Demerara. I received it from thence in the summer of 1834; the entire plant, at the time of its importation, con-

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* Named in allusion to the triangular form of several parts; the sepals form a 3-cornered cup, the gland on which the pollen masses rest is an obtuse-angled triangle; and the stigma is a triangular excavation.

sisting of only two pseudo-bulbs, connected by a very stout rhizoma. To this rhizoma a prodigious number of withered flower-stems were attached; a circumstance so remarkable, that I confidently expected the new-comer would prove a distinct genus, a suspicion which the curious flowers, now for the first time produced, have confirmed. The species grows slowly, but is of easy cultivation, and of a free flowering habit. It has not yet increased."

As a genus it belongs to the set of Maxillaria-like plants, from all which, however, its curious flowers sufficiently distinguish it. Among M. De Lessert's Brazilian drawings is a second and very fine species, with larger flowers and much broader leaves, found by Descourtilz on the trees that surround the foot of the mountains of *La Bucanha*, and on the borders of the *Parahyba*, below the town of *Rezende*, flowering in January. This species may be distinguished as follows:—

T. *latifolium;* foliis obovato-oblongis, vaginis acuminatis supremâ ovario longiore, sepalis lanceolatis acutiusculis, petalis acutis, (labello dorso nudo?) antherâ glabrâ.——Epidendre à chainons *Descourtilz Brasilian drawings, No.* 33.

In the plate fig. 1. shews the petals and lip, magnified; 2. is the lip by itself more magnified; 3. is the column with its gland-crested anther; 4. the pollen masses and gland; and 5. a transverse section of the latter.

* HEUCHERA cylindracea.

Cylindrical Heuchera.

PENTANDRIA *DIGYNIA.*

Nat. ord. SAXIFRAGACEÆ.
HEUCHERA.—Suprà, vol. 15. *fol.* 1302.

H. *cylindrica;* scapo omninò nudo petiolisque patentim hirsutis, foliis cordatis altè rotundato-lobatis crenatis ciliatis dentibus piliferis suprà glabriusculis subtùs ad venas præcipuè pilosis, paniculâ compactâ cylindraceâ subspicatâ, floribus apetalis, staminibus inclusis. *Hooker Fl. Bor. Amer.* 1. 236.

This new species of Heuchera is distinguished from the remainder of the genus, both by its very contracted panicle, and by its flowers being destitute of petals.

It is a hardy herbaceous plant, thriving in any kind of light soil, and flowering in May.

Mr. Douglas found it in the north-western part of North America, in dry mountain woods, near the Kettle Falls. The accompanying drawing was made in the Garden of the Horticultural Society.

Fig. 1. is a magnified flower, with a portion of the calyx cut away; Fig. 2. is a vertical section of the ovary, exhibiting the position of the ovules.

Saxifragaceous plants are generally described as destitute of stipules; those organs are however visible enough in the genus Heuchera.

* See folio 1302.

1925.

* VERBENA Aublétia; *var.* Drummondi.

Sweet Lilac Vervain.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. VERBENACEÆ.
VERBENA.—Suprà, vol. 4. fol. 294.

V. Aubletia, *suprà, vol.* 4. *fol.* 294.
Var. Drummondi; *floribus lilacinis suaveolentibus.*
V. Drummondi. *Hort.*

A beautiful perennial of hardy habit, with delightfully sweet-scented flowers, recently introduced from Louisiana, where it was found by the late Mr. Thomas Drummond, from whom I have native specimens.

The drawing was made in July last, in the richly stocked collection of the Messrs. Rollinsons of Tooting.

A plant in every way so desirable as this, and so easily cultivated, should be found in every garden of pretty flowers.

The Verbena Lamberti var. rosea of the British Flower Garden, stated to have been found by Mr. Drummond in Texas, seems a different plant from this, and if so there are two sorts of Verbena Drummondi in the Gardens.

* See folio 1184.

J. Watts sc.

* TROPÆOLUM brachyceras.

Short-spurred Tropæolum.

OCTANDRIA *MONOGYNIA.*

Nat. ord. Balsaminaceæ, § Tropæoleæ.
TROPÆOLUM.—Suprà, vol. 9. *fol.* 718.

T. *brachyceras ;* foliis peltatisectis segmentis 6-7 oblongo obovatis integris sessilibus, petalis conformibus, calycis segmentis obtusis, calcare brevissimo obtusissimo. *Hooker et Arnott in Bot. of Beechey's Voyage, p.* 14.

A beautiful little Tropæolum, forming the prettiest possible match for T. tricolor, whose habit it possesses, with a substitution of clear, delicate yellow in the petals for the rich crimson of that species. Like it the present species is not uncommon about Valparaiso, in bushy places in the mountains. The Chilians call it *Flor de Perdiz.*

It was originally introduced many years since by Mr. Cruickshanks, but appears to have been lost again; or at least it was never brought into notice till now, when I have the opportunity of publishing a figure of it from specimens obligingly communicated by the Rev. G. Cumming Rashleigh of Hyde Lodge, near Winchester, in August last. This gentleman received the roots, with those of many other plants, about three months previously, from a friend at Valparaiso, and is at present the only known possessor of the species.

It is not a little singular that our gardens should still be without the other beautiful Tropæolums that grow wild near Valparaiso. Weeds enough, including common Lucerne,

* See folio 1547.

and the corn-plants that were carried out from Spain, have been sent home, while some of the most interesting parts of the Chilian Flora remain neglected. For instance, it was only the other day that the first species of Chloræa, of which there are probably twenty in Chili, reached England through Capt. James Mangles, and of the genus before us we are still without T. polyphyllum, whose flowers grow in heads as large as the fist, and T. azureum, which to the herbage of T. tricolor adds the colour of the deep blue of a Siberian Larkspur.

1927
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1
S. Watts sc.

* BURLINGTÓNIA cándida.

Snow-white Burlingtonia.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.

BURLINGTONIA. Perianthium membranaceum, convolutum, obliquum. *Sepala* unguiculata, labello breviora, basi a petalis distincta; *lateralia* basi concava, connata, labello supposita. *Petala* unguiculata, labello parallela, sepalis longitudine æqualia, sed latiora. *Labellum* unguiculatum, bilobum, basi cornutum aut muticum, cum columnâ parallelum, apice dilatatum; ungue canaliculato, lamellato. *Columna* teres, longè clavata, nunc apice appendicibus duabus coloratis aucta; clinandrio dorsali, stigmate utrinque cornuto. *Anthera* unilocularis. *Pollinia* 2, posticè excavata, caudiculæ subulatæ elasticæ adnata.——Herbæ *epiphytæ*, pseudobulbis 1-2-*phyllis, basi foliatis.*

B. *candida;* racemis pendulis, sepalo anteriore apice bilobo supremo petalisque obtusis, labello seriebus duabus lamellarum carnosarum in disco.

Rodriguezia candida. *Bateman in litt.*

Folia *oblonga, apicem versus paulò latiora, subcanaliculata, solitaria.* Racemus *pendulus, 5-florus.* Flores *candidi, membranacei, semidiaphani; venis quibusdam luteis in labello, duos pollices longi.* Sepalum *supremum obovatum, planum, emarginatum; inferius canaliculatum, bifidum, basi concavum, ad calcar incurvum labelli recipiendum, a petalis distinctum.* Petala *obovata, apice patula, circa columnam voluta.* Labellum *cum columnâ parallelum, ungue canaliculato, apice utrinque unidentato, apice dilatatum, subcuneatum, bilobum, venis lutescentibus ornatum; lamellis pluribus distichis carnosis in disco, quarum anteriores multò longiores.* Columna *gracilis, teres, clavata, apice dentibus duabus carnosis stigmati adstantibus; clinandrio declivi immarginato.*

The vegetable kingdom comprehends nothing more perfectly lovely than the delicate flowers of this plant, in which not a tinge of colour sullies the snow-white transparency of the petals, unless it be a faint dash of straw-colour on the lip. For its introduction to this country we are indebted to Mr. Bateman, who imported it from Demerara, and flowered it in his rich collection at Knypersley, in April 1835.

In many respects it agrees with the genus Rodriguezia, especially in its lower sepals being united in one, in its lip having a short horn at the base, in the column being taper, and in the structure of the pollen masses; and I was at first disposed to refer it thither; but its membranous and convolute (not herbaceous, or coloured and spreading) flowers, its unguiculate (not sessile) petals and sepals, its long slender (not dwarf) column, and its membranous 2-lobed lip, so much longer than the other parts, have satisfied me that it is a truly distinct genus.

The species now represented does not stand alone in solitary beauty, but it belongs to a little family, at present consisting of five, each of which

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* Those who have the honour to be acquainted with the Countess of Burlington will feel that no compliment was ever more justly conveyed, than in the dedication of these most lovely flowers to the amiable and accomplished Lady whose name they are henceforth to bear.

vies with the other in loveliness. One of them, *Burlingtonia venusta*, a native of Brazil, may be literally said to sink beneath its long heavy clusters of snow-white blossoms just tinged with pink; a second, seated upon the highest branches of the Cedrela tree, perfumes the forests of the same country with the odour of Jonquils: it is *Burlingtonia fragrans*; while a third, *Burlingtonia rubescens*, delicately spotted with rose colour, inhabits the trunks of the Calabash tree in the mission of Yurimaguas, in the province of Maynas, the hottest part of Peru, and is loaded with blossoms all the year long; and the fourth, *Burlingtonia rigida*, with many peculiarities, to which I shall immediately advert, breathes the delicious fragrance of the violet.

At the end of the column of Burlingtonia fragrans there are two little brownish purple teeth, which are probably rudiments of anthers; even in Burlingtonia venusta there is a trace of them, but a less distinct one. These bodies, in Burlingtonia rigida become long purple ears, fringed with gland-like hairs, and standing erect like a pair of curved pen-knife blades. Nothing indeed is more common throughout the whole of the order than such rudimentary stamens in one state or other. In Zygostates they attain their greatest degree of developement, separating from the column to the very base, and spreading away from it at a right angle. One species of the latter genus exists in Dr. von Martius's Brazilian Herbarium; the other I find among M. Descourtilz's drawings.

Characters of the four additional species of Burlingtonia, and of the last mentioned genus, are given below.

Burlingtonia venusta; racemis pendulis, sepalo anteriore integerrimo supremo acuto, labello infra medium tranversè plicato.——Brazil; Descourtilz's drawings, No. 83.

Burlingtonia fragrans; racemis erectis, sepalo anteriore integerrimo supremo acuto, labello postico cucullato supra unguem bilamellato disco pubescente elevato apice tridentato.——Brazil, in the districts of Morro-Quemado and Macahé, and in the neighbourhood of the town of Bom Jesus de Bananal; Descourtilz's drawings, No. 12.

Burlingtonia rubescens; racemis erectis, sepalo anteriore integerrimo lineari-lanceolato patente supremoque acuminatis, labello basi auriculato bilamellato.——Peru; Pöppig (*nov. gen. et sp. vol.* 1. *p.* 41. *t.* 70 Rodriguezia Batemanni).

Burlingtonia rigida; caulibus teretibus rigidis durissimis erectis per longa intervalla proliferis, pseudobulbis obovatis compressis monophyllis, foliis oblongis, scapo longo rigido apice racemoso, labello basi mutico disco sparsè lamellato, columnâ pubescente apice appendicibus 2 falcatis erectis pilosis auritâ.——Found in Brazil, near Villa Nova de Almeida, by Prince Maximilian of Wied Neuwied, and preserved in the Brazilian Herbarium of Dr. Von Martins.——This singular plant has stiff, apparently erect stems, the thickness of a crow's quill, which throw out pseudo-bulbs at intervals of from 1½ to 2 feet, each pseudo-bulb pushes forth its own roots, which are extremely long and as fine as hairs; and gives birth to a scape of the same thickness and texture as the main stem, a foot and half long, at the tip of which are clustered 5 or 6 flowers, the size of those of Burlingtonia nivea, with the perfume of violets. I believe Messrs. Loddiges possess living plants of this.

ZYGOSTATES. *Sepala* membranacea, libera, reflexa. *Petala* dilatata fimbriata, sepalis multò majora, patula. *Labellum* cymbiforme, membranaceum, patens, basi intus cornutum aut dentatum, cum columna articulatum. *Columna* teres, anticè excavata, basi utrinque brachio aucta lineari, apice globoso, sepalis æquali, patentissimo (stamine sterili). *Rostellum* longissimum, subulatum, arcuatum. *Anthera* rostrata, unilocularis. *Pollinia* 2, caudiculâ subulatâ, glandulâ minimâ.——Herbæ *epiphytæ, acaules*, Brazilienses, racemis *penduiis*, floribus *parvis viridi-luteis*.

1. *Zygostates cornuta;* cornu unico incurvo ad basin labelli, petalis rhomboideis.——Brazil, Prince Maximilian of Wied Neuwied.
2. *Zygostates lunata;* dente duplici ad basin labelli, petalis lunatis.——On trees on the highest wooded mountains of the district of Bananal in Brazil, in the midst of dense cold fogs, which are almost perpetual, flowering in March; Descourtilz's drawings, No. 4.——Sepals whitish. Petals greenish yellow.

1928.

* PERESKIA aculeáta.

West Indian Gooseberry.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. CACTACEÆ.
PERESKIA. Suprà, vol. 17. *fol.* 1473.

P. *aculeata ;* foliis ellipticis, aculeis in axillâ solitariis demùm in caule fasciculatis, floribus subpaniculatis, fructu globoso sepala foliacea gerente. *De Cand. Prodr.* 3. 474.
Grossularia americana. *Plum. gen. t.* 26.
Cactus Pereskia. *Linn. sp. pl.* 671.

I do not find a figure of this common plant in any of our English books; a circumstance that is perhaps to be accounted for by its seldom flowering. In fact it is usually cultivated as a stock on which other species of Cactaceous plants may be grafted, rather than for the sake of its own flowers and fruit.

And yet the latter are not without their beauty. The flowers have not indeed the deep brilliant colours of the more popular plants of the order; but they form fine clusters of white and green cups, and the fruit is like a rich mellow gooseberry; whence the colonial name of West Indian Gooseberry.

In the whole genus Pereskia, and in this species in particular, the leaves are as large, and fully organised as in any plants whatever; and the woody matter of the stem is one of the best illustrations that physiologists are acquainted

* See folio 1473.

with, of the plan on which Exogenous trunks are formed. This is easily seen by taking an old stem of Pereskia aculeata, and macerating it for a few weeks, when the whole of the horizontal cellular system decays, leaving behind it the longitudinal system in the form of a woody skeleton.

The drawing was communicated in October 1833, from the Garden of W. M. Christy, Esq. of the Clapham Road, by his intelligent gardener, Mr. James Nash.

1929.

Pub by J. Ridgway 169 Piccadilly. Feb. 1. 1837.

* ONCÍDIUM lunátum.

Crescent-lipped Oncidium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.
ONCIDIUM.—Suprà, vol. 13. *fol.* 1050.

O. *lunatum ;* pseudobulbis oblongis compressis 1-2-phyllis, foliis angustè oblongis planis obtusis scapo brevioribus, scapo racemoso, sepalis petalisque spathulatis retusis, labello pubescente lunato basi piloso : laciniis lateralibus minimis inflexis, cristâ lineari apice depressâ utrinque bidentatâ : dentibus glanduligeris, alis columnæ cuneatis integris, clinandrio posticè dentato. *Suprà, fol.* 1920. *in textu.*

Perianthium *flavum, laciniis croceo maculatis.* Labellum *album, cristâ medio sanguineo-lineatâ, limbo obscurè croceo maculato.* Alæ *columnæ sanguineo fasciatæ.*

This very pretty species of Oncidium was imported from Demerara by Messrs. Loddiges, with whom it flowered in their stove for epiphytes in June last.

It is in some measure related to O. Harrisonianum, from which it is however abundantly distinct. The crescent-shaped lip is, as far as I know, quite peculiar to this species; and the very blunt flat sepals conspicuously point it out.

Fig. 1. is a magnified representation of the lip, with the crest fringed with glands at the angles. Fig. 2. is the upper end of the column, with the wedge-shaped banded appendages, and the toothed clinandrium.

* See folio 1920.

Notes upon Burlingtonia candida, fol. 1927.

Since the appearance of the last number of this work, I have been favoured by the following memorandum from Mr. Bateman:—

"The plant to which you formerly gave the name of Rodriguesia Batemanni, and which you now call 'Burlingtonia candida,' is a native of Demerara, from whence it was sent to me in 1834 by Mr. Colley, and it is, I think, without exception, the most beautiful new species that has hitherto made its appearance amongst his collections.

"It produces its flower-spikes freely, twice every year, and their large blossoms, suspended over the margin of the pot in which the plant grows, have a singularly delicate effect, resembling nothing so much as white satin trimmed with gold.

"While at Vienna last year, I was shewn, by the kindness of M. Endlicher, some of the drawings belonging to his and Dr. Pœppig's work on the plants of Peru; among the number was a species bearing so strong a resemblance to our present subject, that I did not hesitate to pronounce it to be Rodriguesia Batemanni, and it was accordingly published by those gentlemen under that name in their admirable 'Genera et Species Plantarum.' I have now before me, through the liberality of Dr. Pœppig, wild specimens gathered in Maynas by that intrepid traveller, and on comparing these with specimens of the Demerara species produced in my stove, I am satisfied that I erred in supposing them to be the same. The following are among the more prominent differences. Dr. Pöppig's Rodriguesia Batemanni (now Burlingtonia rubescens) has stiff, upright many-flowered spikes; B. candida few-flowered, entirely pendulous ones. The flowers of the latter are nearly twice the size of those of the former, and streaked with gold instead of being spotted with red. The column of B. candida is nearly half the length of the lip; while in B. rubescens it is not one-third. In B. rubescens, too, there is a sort of tooth placed on the under side, at the extremity of the lip, which is wholly wanting in B. candida."

To this I would add, that it must have been difficult for the most experienced Botanist to have distinguished Burlingtonia rubescens from B. candida, under the circumstances by which alone Mr. Bateman could compare them. They are very similar in appearance: no one could have anticipated that so many beautiful species, distinct as they nevertheless are from each other, would have been suddenly discovered to form a new genus; and only an actual comparison of specimens could have shewn that the Rodriguesia Batemanni of Pöppig and Endlicher was distinct from Burlingtonia candida, to which I once applied the former name.

Miss Drake del.

S. Watts sc.

Pub by. J. Ridgway 169. Piccadilly Feb 1. 1837.

* VERONÍCA perfoliáta.

Perfoliate Veronica.

DIANDRIA *MONOGYNIA.*

Nat. ord. SCROPHULARIACEÆ.

VERONICA, L.—*Calyx* 4-raro 5-partitus, campanulatus vel compressus. *Corolla* tubo brevissimo vel rariùs elongato, limbo 4-partito, laciniis omnibus integerrimis patentibus planis, supremo latiore. *Stamina* 2, ad latera laciniæ corollinæ supremæ sita, divergentia, inferiorum vestigia nulla. *Antheræ* biloculares, loculis apice confluentibus. *Stigma* vix incrassatum. *Capsulæ* valvulæ medio septiferæ v. bipartibiles. *Semina* nuda.——Herbæ, suffrutices, fruticisve. Folia *opposita, alterna vel verticillata.* Inflorescentia *axillaris, racemosa, v. spicata.* Flores *sæpius cœrulei, v. albi. Benth. Scroph. Ind. p.* 44.

V. *perfoliata;* foliis ovatis acuminatis basi connatis integerrimis glaberrimis, racemis lateralibus pedunculatis multifloris. *Dietr. sp. pl.* 1. 524.

V. perfoliata. *R. Br. Prodr.* 1. 434. *Bot. Mag.* 1936. *Röm. & Sch Syst. veg.* 1. 119. *Mant.* 1. 112.

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* An old, but not classical Latin name, whose derivation has occupied and perplexed etymologists as much as any upon record. Linnæus thought it a corruption of Vetonica, which, as Professor Martyn observes, confounds it with Betonica. The same learned writer gives us a Greek etymology, from Hoffmann, φερονικη, composed of φερω to bear, and νικη, victory, or distinction, as if we should say in English, *bearing the bell*, on account of its beauty. But we doubt whether this be more than a pun. Its common etymology is of a mule kind, between Greek and Latin, from *verus*, or rather *vera*, true, and εικων, a figure; and this, illiterate and barbarous as it is, has the sanction of the superstitious legend of St. Veronica, whose handkerchief is recorded to have received the impression of our Saviour's face, as he used it, in bearing his cross to the place of crucifixion. But we find nothing analogous in any of the herbs which have borne this name, nor any character, true or false, stamped upon them, except that of their own peculiar beauty. Ambrosius says the word is German, and originated in the druggists' shops of that country, though he favours the idea of its being corrupted from *Vetonica* for *Betonica*, or *Betony*. The chief object of this controversy is to learn the true pronunciation of the name in question. If there be any truth in its Greek origin, the *i* must be long; but if otherwise, the analogy of *Betonica* may justify the usual practice, of throwing the accent on the *o*. —*Smith*.

A very pretty perennial plant, native of the country near Port Jackson, whence it was many years since introduced to our gardens. It is seldom cultivated, and yet its graceful racemes of pale blue flowers are exceedingly beautiful. It is a little tender, and will not bear our ordinary winters unprotected, but it may easily be kept with a very moderate degree of care.

The drawing was made last July, from plants growing in the open ground in the fine collection of handsome hardy plants in the Nursery of the Messrs. Rollissons of Tooting.

No genus is more extensively distributed in the old world than Veronica; but the principal part of the species, known in Europe, consist either of weedy plants, or of species not particularly striking for their beauty; it is in the southern hemisphere, in New Holland, Van Diemen's Land, and New Zealand, that the most interesting kinds are to be found. *V. diosmifolia*, *salicifolia*, and *catarractæ*, all as yet unknown in Europe in a living state, yield in beauty to very few plants of the same countries.

Miss Drake del.

S. Watts sc.

Pub by J. Ridgway 169 Piccadilly Feb 1. 1837.

1931

* PETÚNIA intermédia.

Intermediate Petunia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SOLANACEÆ.
PETUNIA.—Suprà, vol. 19. *fol.* 1626.

P. *intermedia;* minutè glandulosa, canescens, foliis linearibus obtusis, corollis infundibularibus laciniis obtusis.
Nierembergia intermedia. *Graham in Edinb. N. Phil. Journal,* 1832. *D. Don in Sweet's Fl. Garden, t.* 237.
Salpiglossis linearis. *Hooker Bot. Mag. t.* 3256.

First published in the Edinburgh Philosophical Journal, where it is stated by Professor Graham to have been introduced from Buenos Ayres in 1832.

It is a half-hardy greenhouse herbaceous plant, with gay, changeable, purple and violet flowers, and hoary leaves; and it does pretty well out of doors in the summer. It cannot, however, be compared in point of beauty with either Petunia violacea, or any of the graceful and delicate Nierembergias. It readily multiplies by cuttings.

I regret being unable to admit this species into either of the genera in which it has been hitherto stationed; it is certainly no Salpiglossis, on account of its pentandrous regular flowers; nor will it associate with Nierembergia, with whose slender-tubed corollas it is altogether at variance. Petunia is plainly the genus into which it must enter; as I think will be obvious, if its characters are attentively compared with those of P. violacea.

* See folio 1626.

1932.

J. Watts sc.

Pub. by J. Ridgway. 169. Piccadilly. February 1. 1837

* CRATÆGUS flava; *var.* lobâta.

Rough-barked Thorn; single-fruited variety.

ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ.
CRATÆGUS. *Suprà, vol.* 13. *fol.* 1128.

C. *flava;* foliis rhomboideis subtrilobis incisis serratis stipulis glandulosis, fructibus turbinatis solitariis cymosisve, spinis arcuatis, pomis tetrapyrenis, putamine crassissimo.
C. flava. *Ait. Hort. Kew.* 2. 169. *De Cand. Prodr.* 2. 628. *Loudon Arb. & Frut. Brit.* 3. 823.
Mespilus Michauxii. *Pers. synops.* 2. 38.
β. lobata; fructibus subsolitariis, foliis acutioribus minùs cuneatis.
C. lobata. *Bosc. in De Cand. Prodr.* 2. 628.
Mespilus lobata. *Poir. suppl.* 4. 71.
? Cr. turbinata. *Pursh. fl. Am. sept.* 2. 735. *Elliott. Sketch* 1. 549.

A small tree, with the bark of the stem split into many deep rugged fissures like that of an elm, and with a compact spreading head. It is in some parts spiny, as represented in the accompanying drawing; sometimes it is unarmed.

That it is a mere variety of C. flava, must be evident to any one who will compare the two plants growing; in fact, it seems to differ in almost nothing, except its fruit being solitary instead of in clusters, and its more sharply cut leaves. The two supposed species are in fact undistinguishable in general appearance.

What its synonyms may be among American writers, can only be conjectured. It seems to be the same as C. turbinata of Pursh and Elliott; but the specific phrase of

* See fol. 1611.

those authors is insufficient to settle the question. Undoubtedly *C. flava* of Elliott was a misnomer; nor can the summer haw of the same writer, with oval well-flavoured fruit, from sandy soil on the sea-islands of Carolina, be referred to the true C. flava, as he supposes.

1933

* CRATǼGUS oxyácantha; *var.* Oliveriâna.

Hairy-leaved Black Hawthorn.

ICOSÁNDRIA *DI-PENTAGYNIA.*

Nat. ord. Rosaceæ, § Pomeæ.

CRATÆGUS.—Suprà, vol. 13. *fol.* 1128.

C. oxyacantha. *Suprà, vol.* 13. *fol.* 1128.
var. *Oliveriana;* foliis subtùs petiolisque pubescentibus, pomis ovalibus nigris tetrapyrenis.
C. Oliveriana. *Bosc. in De Cand. Prodr.* 2. 630.
C. oxyacantha, no. 10. *Loudon Arb. & Frut. Brit. vol.* 3. *p.* 831.

This supposed species is clearly nothing more than a variety of the common hawthorn; from which in fact it differs in little, except its oval black haws and downy leaves. The latter are generally more or less blotched with brown in the autumn; and the cymes of haws are more compact than those of the common Cr. oxyacantha. The late M. Bosc, the author of the name, was one of those species-makers, who do serious injury to science by the number of errors they crowd into it.

It is said to be a native of Asia Minor; I have not seen any wild specimens.

Mr. Loudon has rightly reduced the plant to its true type; it is not in fact very different from the black-fruited hawthorn sometimes found wild in the woods of Great Britain. Of course it is not to be confounded with *C. nigra*, a genuine and very distinct species.

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* See folio 1161.

1934.

* SPIRANTHES bracteósa.

Long-bracted Lady's Traces.

GYNANDRIA *MONANDRIA.*

Nat. Ord. Orchidaceæ, § Neottieæ.
SPIRANTHES. *Suprà, vol.* 10. *fol.* 1043.

S. *bracteosa*; foliis rosulatis oblongis acutis, scapo vaginato pubescente, bracteis lineari-lanceolatis foliaceis floribus longioribus, sepalis ovatis pubescentibus acutis lateralibus basi connatis, petalis glabris sepalo supremo agglutinatis et conformibus, labello pubescente: ungue obovato canaliculato mutico limbo subcuneato rotundato apiculato.

An addition to the very difficult genus of which our own sweet Lady's Traces forms a part. It was imported from Saint Catharine's by Messrs. Loddiges, in whose collection the drawing was made in May 1835.

It is readily known by its long leafy bracts, downy stems and flowers, spreading oval root leaves, and peculiar lip.

Of course a stove herbaceous plant.

Fig. 1. is a magnified view of an entire flower; fig. 2. is a still more highly magnified view of the back of the column and the lip, the sepals and petals being cut away.

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* In allusion to the spiral manner in which the flowers of many species are arranged.

1935.

Miss Drake del. J. Watts sc.

Pub by J. Ridgway ... Piccadilly Feb 1 1837.

1935

* TROPÆOLUM trícolor.

Three-coloured Tropæolum.

OCTANDRIA *MONOGYNIA.*

Nat. Ord. Balsaminaceæ, § Tropæoleæ.
TROPÆOLUM. *Suprà, vol.* 9. *fol.* 718.

T. *tricolor;* scandens, gracile, foliis peltatis 5-6-partitis: laciniis obovatis oblongisve obtusis, floribus solitariis pedicellis multò brevioribus, calycibus turbinatis coloratis petalis obovatis integerrimis æqualibus calcare gracili attenuato brevioribus.
T. tricolorum. *Sweet Brit. Fl. Gard. t.* 270. *Hooker in Bot. Mag. t.* 3169.

Like the neat little *T. brachyceras,* figured in the last number of the Botanical Register, this is a native of bushy places on the hills near Valparaiso, whence it has been for some years introduced to our gardens; so that it is now as common as the former is rare.

For some time after its arrival it was a puny sickly plant, shewing but little sign of the extraordinary beauty that every one now knows is its attribute; but the skill of our excellent English gardeners has so completely overcome any difficulties in its management, that nothing is now more common than to see large pieces of treillage covered with hundreds of its gay, scarlet, and purple flowers.

The most ornamental mode of displaying its graceful mode of growth, is by allowing it to climb over wires fixed to the pot, and bent into elegant forms, especially if the wires are made to represent the skeleton of some solid figure, and not kept upon the same plane.

The drawing was made in the nursery of Messrs. Lowe and Co. of Clapton, some years since.

* See folio 1547.

* DELPHINIUM montánum.

Mountain Larkspur.

POLYANDRIA *TRIGYNIA.*

Nat. ord. RANUNCULACEÆ.
DELPHINIUM. *Suprà, vol.* 14. *fol.* 1192

D. *montanum;* petiolis basi non dilatatis, foliis pubescentibus 5-lobatis: lobis basi cuneatis trifidis incisis, racemo simplici, bracteis calycibus capsulisque pubescentibus, calcare inflexo. *De Cand. prodr.* 1. 55.
D. hirsutum. *Roth. beitr.* 88.
D. elatum. *All. pedem. n.* 1504.

There are in this country many beautiful species of Delphinium, about which little is known except to mere Botanists. They have been little cultivated, and never figured; and, to the great mass of the lovers of plants, are as new as if they had never been introduced. I propose to bring them by degrees into notice by the assistance of the Botanical Register, feeling sure that in so doing I shall be rendering a service to both Horticulture and Botany. For what can be more graceful than the tall slender stems of many species of Delphinium, or more perfect than the form of their dissected leaves, which no insects dare touch, or more agreeable than the rich blue, whether deep or pale, of their singular flowers? what is there more easy of cultivation, and more perennially durable? and what species of well-known hardy plants are more in need of figures to illustrate them?

* See folio 1503.

Of such plants Delphinium montanum is one of the handsomest. It grows 5 or 6 feet high, it is covered with soft green down, and its flowers, which are a pale blue, are compactly arranged in simple or branched racemes, sometimes as much as two feet long. Its roots are perennial, and it produces seeds abundantly.

Its native country is the Alps of central Europe. De Candolle says it inhabits the vallies of mountains nearly as high up as the limits of trees; as in the valley of Eynes in the Pyrenees, on the Alps of Provence and Switzerland, and in the Appennines. Haller speaks of it as extremely common on the mountains of Switzerland, especially on Mounts La Varaz and Enzeindu, Lioson, Taveyanaz, Prapioz, Audon, and elsewhere.

With us it is a hardy perennial, growing vigorously among bushes, and flowering in August. The accompanying drawing was made in the garden of the Horticultural Society.

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* CHÝSIS aúrea.

Golden-flowered Chysis.

GYNANDRIA *MONANDRIA.*

Nat. Ord. ORCHIDACEÆ, § EPIDENDREÆ.

CHYSIS. Sepala paulò connata, patula; lateralia pedi producto columnæ adnata et calcar simulantia. *Petala* sepalis conformia. *Labellum* trilobum, patulum, venis basi callosis. *Columna* marginata, canaliculata, mutica. *Anthera* subrotunda, opercularis, glabra. *Pollinia* 8, in laminam luteam semifusa; quatuor exterioribus tenuibus quatuor interiora crassiora abscondentibus. *Rostellum* laminatum, convexum.——Herbæ *epiphytæ, occidentales ab arboribus pendulæ;* caulibus *Cyrtopodii depauperatis,* foliis *nervosis basi vaginantibus,* racemis *lateralibus multifloris.*

Chysis *aurea.*

Caules *penduli, subclavati, articulati, squamis fuscis, membranaceis vestiti.* Folia *ovato-lanceolata, basi vaginantia, nervosa, undulata.* Racemi *pedunculati, ex axillâ folii inferioris erumpentes, penduli, multiflori.* Sepala *ovata, obtusa, subundulata, basi alba, cæterùm crocea; lateralium margine anteriore infracto.* Petala *ovato-oblonga, obtusa, magnitudine et colore sepalis similia.* Labellum *album, concavum, venis sanguineis, trilobum; lobo laterali oblongo, obtuso, crispo, apice subsaccato; venis 5 mediis tumidis callosis, tribus lateralibus utrinque pubescentibus elevatis.* Pollinia *sunt hujusmodi; lamina adest tenuis, lutea, pulverulenta, bipartita, utrinque biloba, in clinandrium prona, marginibus suis incrassatis, et incurvis (= pollinia 4 basi in laminis duabus geminatìm cohærentia.) Præterea ad sunt 4 alia minora, et prioribus supertecta, quorum duo ab angulis posterioribus, et duo ab anterioribus lamellæ supradictæ fissæ oriuntur (= pollinia 4 alia minora). Horum corporum vera indoles latet; sed verosimiler pollinia 8 adsunt quorum 4 exteriora in laminam fissam margine bilobam deliquescunt.*

The first knowledge I had of this beautiful epiphyte was from Messrs. Lowe and Co. of Clapton, who sent it to me in June 1836, with a note, from which the following is an extract:—

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* Χύσις a melting. The pollen masses of this plant are as it were fused together.

"It was collected in 1834 by Mr. Henchman, in the valley of Cumancoa, in Venezuela. Mr. H. describes it as growing suspended by long fibrous roots from the lateral branches of trees, so that its pseudo-bulbs, which in their growing state are uncommonly brittle, hang downwards and wave in the wind, which would otherwise be sufficient to break them. It has a very delicate perfume in the morning, but appears to lose it in the heat of the day. The remains of spikes have been seen, which had produced ten flowers."

Shortly afterwards Mr. Bateman forwarded it from Knypersley, with this memorandum :—

"The plant which produced the specimen from which your drawing is made, I derived in September (1835) from Messrs. Lowe and Co. of the Clapton Nursery. It had then been only recently imported, and was just beginning to push a shoot, which has ever since continued to increase in length and strength. It is now, although apparently far from completed, upwards of two feet long, and equal in girth to the stem of an ordinary Cyrtopodium. It is suspended from a rafter in a pot (filled with broken potsherds and turfy peat), and its stems are completely pendulous, like those of some eastern Dendrobia. Common as is this pendent habit in the Old World, our present subject presents, as far as I am aware, the only example of its occurrence in the New. It may also be worthy of remark that the fleshy stems of this species, although apparently similar in structure to those of Cyrtopodium, Catasetum, Myanthus, Mormodes, Cycnoches, and the like, seem utterly incapable of pushing a shoot after the *radical eye* is gone, several healthy pieces having remained without *breaking* for more than a year; whereas from any of the above-named genera, under similar circumstances, plants would have been long since obtained."

With regard to the affinity of this genus, although it has in so many respects the habit of certain genuine Dendrobia, and in others that of Cyrtopodium and its allies, it is in reality essentially different from those genera, and much more nearly akin to Epidendrum and its section. Its pollen masses consist of two yellow plates, placed side by side in the bed of the anther, united at the back and slightly notched on the outer edge, so that it is in reality four-lobed, the lobes being extremely unequal; each lobe has a thickened margin, and rising up, overlies and conceals four other lobes of a thicker texture and smaller size, two of which arise from the back and two from the front of the inner edge of the principal lobes of the plate above described. This remarkable structure may be theoretically described as being equivalent to eight pollen masses, of which the straps of connection, such as exist in all Epidendreæ, are run together into two plates, from an expansion of the edges of which the pollen masses appear to spring.

This is a very showy plant; the colours of the flower being very bright, its texture firm, and its surface even and waxy. The lip, with its crimson veins, and narrow elevations radiating from the base, is especially worthy of attention.

Fig. 1. is a representation of the upper portion of the column; 2. is the lip laid open; 3. are the pollen masses spread open, to shew their structure.

1938.

Pub by J. Ridgway 169 Piccadilly Mar. 1. 1837.

S. Watts sc.

* NUTTALLIA cordata.

Heart-leaved Nuttallia.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ.

NUTTALLIA. *Calyx* simplex (nunc duplex, exteriore triphyllo), quinquefidus. *Capsulæ* plurimæ, monospermæ, in annulo congestæ. *Hooker in Bot. Mag.* 3287.

N. *cordata ;* foliis radicalibus cordatis obtusis inciso-lobatis caulinis tripartitis subintegris simplicibusque, bracteis calycibusque apice pilosis, stigmatibus ultra antheras parùm exsertis.

I received this plant in August, 1836, from Mr. Garvie of the Stratford Nursery, to whom it had been sent by Mr. Murray, the Curator of the Glasgow Botanic Garden, as a species of Nuttallia, raised from seeds collected by Drummond in North America.

It was a remarkably pretty herbaceous plant; but unfortunately the specimens, from which the drawing was taken, have been mislaid, and no description of the species can be given.

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* Named after Mr. Thomas Nuttall, a writer on the Systematic Botany of North America.

Pub by J. Ridgway 169. Piccadilly March 1. 1837.

* CRATÆGUS flāva.

Rough-barked Thorn.

ICOSANDRIA *DI-PENTAGYNIA.*

Nat. ord. Rosaceæ, § Pomeæ.
CRATÆGUS.—Suprà, vol. 13. *fol.* 1128.

C. *flava;* foliis rhomboideis subtrilobis incisis serratis, stipulis glandulosis, fructibus turbinatis solitariis cymosisve, spinis arcuatis, pomis tetrapyrenis, putamine crassissimo. *Suprà, fol.* 1932.
C. flava. *Ait. Hort. Kew,* 2. 169. *De Cand. Prodr.* 2. 628. *Loudon Arb. et Frut. Brit.* 3. 823.
Mespilus Michauxii. *Pers. Synops.* 2. 38.

The accompanying plate shews the true character of Cratægus flava, the single-fruited variety of which was noticed at folio 1932.

I find nothing to add to the remarks then made, except that both varieties are among those which are the least worth cultivating for their beauty. In fact, their mode of growth is stiff and inelegant, their foliage is neither abundant nor deep-coloured, their fruits are indistinguishable at a little distance from the leaves they grow among, and there is no character in the flowers beyond that whiteness and sweetness which belongs to all the Hawthorns.

* See fol. 1611.

A. v. Drake del.

Pub. by J. Ridgway 169 Piccadilly Mar 1 1837.

NEMÓPHILA atomária.

Speckled Nemophila.

PENTANDRIA *MONOGYNIA.*

Nat. ord. HYDROPHYLLACEÆ.
NEMOPHILA. *Suprà, vol.* 9. *fol.* 740.

N. *atomária ;* foliis oppositis pinnatifidis basi in petiolum angustatis : lobis subrotundis indivisis, calycis sinubus minimis reflexis, pedunculis axillaribus corollisque hirtis, ovariis multi-ovulatis.
N. atomaria. *Fischer in litt.*

A new, but not very pretty, species of Nemophila, nearly related to the beautiful N. *insignis,* but entirely destitute of the brilliant blue in the corolla of that species.

It is a hardy annual, and probably a native of California; but upon that point there is no precise information. The seeds were sent to the Horticultural Society in 1836, from the Imperial Garden at St. Petersburgh.

Independently of the small size of the flowers, and their want of blue, this species is to be distinguished from N. insignis by the following characters. The leaves are less deeply cut, and their lobes are broader, and hardly ever divided into secondary lobes; the flower-stalks are rough with hairs, not smooth; the recesses of the calyx have much shorter appendages; the corolla is hairy, and strongly marked with numerous, dull, lead-blue specks, both on the inside and outside; the style, too, is longer and rather hispid.

* See folio 1601.

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* MÓRNA nítida.

The Beautiful Morna.

SYNGENESIA *POLYGAMIA ÆQUALIS.*

Nat. ord. Asteraceæ, or Compositæ.

MORNA. *Capitulum* homogamum. *Involucrum* coloratum, exsuccum, imbricatum, squamis omnibus petiolatis! glaberrimis. *Receptaculum* planum, nudum. *Corollæ* hermaphroditæ, infundibulares. *Antheræ* basi bicalcaratæ. *Achænia* glabra, scabriuscula, compressa, longè rostrata. *Pappus* scaber, uniseriatus, setaceus, æqualis, basi pubescens.——Caules *apice cymosi, foliati.*

Morna *nitida.*

Caules *erecti, subsimplices, pubescentes, versus fastigium arachnoideo-lanati.* Folia *erecta, linearia, basi paulò latiora, mucronulata, pubescentia.* Capitula *cymosa, homogama, multiflora, pedunculis ad involucrum usque foliatis.* Involucrum *hemisphæricum, polyphyllum, imbricatum, multiseriatum; squamis intensè aureis, acutissimis, serrulatis, longe petiolatis; exterioribus ovato-lanceolatis, intimis linearibus apice cuneatis, omnibus basi lanatis.* Receptaculum *planum, nudum.* Flosculi *homogami, infundibulares, glabri, 5-dentati.* Ovarium *levissimè pubescens, compressum, longè rostratum.* Pappus *setaceus, uniseriatus, scaber, basi pilosus.*

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* Morna, one of the heroines of the Northern romances, was a beautiful lady, confined in a golden hall, guarded by a thousand golden lances, and attended night and day by knights, whose sole office was to do her bidding in all things, except allowing her to escape from her splendid thraldom. Her court could only be held where the sunbeams and the summer breeze had the freest access. During her residence on earth, she was worshipped as a divinity, and when she disappeared, her palace, her knights, and her lances vanished with her. She is described as having been a person of the most kind and gentle disposition, but of a melancholy and somewhat imperious temperament; her figure was noble and commanding, her voice melodious, and her smile so resistless, that the fiercest animals were tamed by merely looking on her. See *Viseling de reb. Scand. orat. p.* 23. After her, various heroines of northern romance have been named Morna or Morni; in the present instance the ingenious reader will have no difficulty in tracing a resemblance between this mystical personage and the plant before him.

A beautiful perennial (?) everlasting-flower, inhabiting the dry country about the Swan River, whence it was introduced in the year 1835, by Sir James Stirling. The first time it was publicly seen in this country was at one of the great exhibitions held in the Garden of the Horticultural Society in 1836, when the judges awarded to Robert Mangles, Esq. who exhibited it, a Knightian Medal. To that gentleman I am indebted for an opportunity of figuring it.

It is indeed a lovely plant, with its starry heads of the most rich and transparent yellow, having quite a metallic brilliancy, when illuminated by the sun. It may be said indeed that Elichrysum bracteatum and bicolor are more showy; but they want altogether the softness and delicacy of Morna, while the latter is destitute of none of their richness and brilliancy.

The genus differs from *Leptorhynchos*, in its pappus not being feathery or paleaceous, nor its achænium papillose, nor the beak of that organ short; and in its whole habit. *Millotia* has a cylindrical involucre, whose scales are in one row. The most striking features of *Morna*, in a distinctive point of view, are its scabrous setaceous pappus, its long-beaked fruit, and the stalked leaflets of its involucre.

S. Watts sc.

by J. Ridgway 169 Piccadilly March 1. 1837

1942

* BOLBOPHÝLLUM barbígerum.

Bearded Bolbophyllum.

GYNANDRIA *MONANDRIA.*

Nat. Ord. ORCHIDACEÆ.

BOLBOPHYLLUM, Thouars. Sepala erecta, acuminata, subæqualia, lateralibus cum pede columnæ connatis et basi obliquis. *Petala* nana (rarissimè sepalis subæqualia). *Labellum* cum pede columnæ articulatum, unguiculatum, sæpiùs integrum et posticum. *Columna* nana, anticè bidentata et bicornis. *Anthera* 1-2-locularis. *Pollinia* 4, libera, valdè inæqualia, nunc in uno connata, nunc per paria cohærentia, altero cujusvis paris minuto lobuliformi.—— Herbæ *epiphytæ*, rhizomate *repente pseudobulbifero.* Folia *coriacea, avenia.* Racemi *radicales.* Lindl. Gen. & Sp. Orch. p. 47.

B. *barbigerum;* pseudobulbis lenticularibus, foliis solitariis racemo erecto brevioribus, bracteis ovatis amplexicaulibus ovario subæqualibus, sepalis lineari-lanceolatis acuminatis, petalis subulatis columnâ brevioribus, labello lineari-lanceolato acuminato villoso apice stuposo-barbato.

A most curious plant introduced from Sierra Leone, by Messrs. Loddiges, with whom it flowered in June 1836. It grows pretty freely under the hot damp system of cultivating epiphytes.

That a drawing is altogether incapable of representing so strange a conformation as exists in this species, will be evident in the course of the following description. The pseudo-bulbs are small, lenticular, very pale green bodies, from one edge of which springs an oblong, firm, smooth, veinless leaf. From the opposite edge of the pseudo-bulb there rises a raceme of flowers, about six inches long, the base of which is protected by brown, narrow, imbricated scales. The number of flowers in each raceme is from 15

* From βολβος a bulb, and φυλλον a leaf, in allusion to the leaves universally arising from a bulb-like stem or pseudo-bulb.

to 20. The bracts are, for the size of the flowers, rather large, broad, ovate, a little stem-clasping, very pale green, and stained with crimson at the points. The three sepals are narrow and taper to a point, pale green externally, dull chocolate brown in the inside (*fig.* 2. *a. a. a.*). The petals are minute, slender-pointed scales, shorter than the column, and not discoverable without disturbing the sepals. The column is dwarf, and terminated in part by two long curved horns (*fig.* 1. *a. a.*, and *fig.* 2. *c.*). The anther is a little round lid, beautifully studded with crystalline points (*fig.* 1.). The lip (*fig.* 2. *b.*) is one of the most extraordinary organs known even among Orchidaceous plants; it is a long, narrow, flexuose, sharp-pointed body, closely covered with a yellow felt; just within its point there is a deep purple beard of exceedingly fine compact hairs; on the under side, at a little distance from the point of the lip, is another such beard; and besides these there is, at the end of the lip, a brush consisting of very long, purple threads, so excessively delicate, that the slightest disturbance of the air sets them in motion, when they wave gently to and fro, like a tuft of threads cut from a spider's web; of the last mentioned hairs some are of the same thickness throughout, others terminate in an oblong club, so that when the hairs are waving in the air, and I do not know that they ever are at rest, a part float along gracefully and slowly, while the others are impelled by the weight of their glandular extremities to a more rapid oscillation.

Nor is this all; the lip itself, with its yellow felt, its two beards, and its long purple brushes, is articulated with the column by such a very slight joint, that to breathe upon it is sufficient to produce a rocking movement, so conspicuous and protracted, that one is really tempted to believe that there must be something of an animal nature infused into this most unplant-like production.

Messrs. Loddiges possess another species, with similar habits.

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* PHYCÉLLA brevítuba.

Short-tubed Phycella.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDACEÆ.
PHYCELLA. *Suprà, vol.* 16. *fol.* 1341.

P. *brevituba;* periantho $1\frac{3}{8}$ unciali basi annulari vix tubato infundibuliformi rubro intùs luteo-striato, stylo perianthium et stamina superante, filamentis pallidis apice rubris: petalinis limbum subæquantibus, processibus faucialibus sex $\frac{1}{4}$-uncialibus tenuiter subulatis, foliis semunciam vel ultra latis. *Herbert MSS.*
P. brevituba. *Herbert Amaryllidaceæ, p.* 154.

Mr. Herbert, to whom I shewed the specimen of this plant when I received it from Mr. Knight's Nursery in the King's Road, in July 1836, determined it to be Phycella brevituba, with the specific character of which he shortly after favoured me.

Having been indulged with an early sight of an elaborate work, about to be published by the same gentleman, upon the natural order Amaryllidaceæ, I find the species stationed next *P. Herbertiana,* with the observation that it is remarkable for the tube of the flower being nearly obsolete.

It is a matter of no little difficulty to distinguish the species of this beautiful genus; I may almost add, that it is impossible to do so, in the absence of information concerning the small appendages found at the base of the filaments. These bodies differ in number, proportion, and size in different species, and afford the most certain distinctive characters I am acquainted with. In *P. brevituba* they are six, awl-shaped, slender, and placed in pairs at the base of the sepaline stamens (*fig. B.*); in *P. ignea* they are twelve in number, of which six are awl-shaped, and in pairs as in *P. brevituba,* and six minute, rudimentary, gland-like, and

* See folio 1341.

at the base of the petaline filaments (*fig. A.*); in *P. attenuata*, which is also very like *P. brevituba*, the processes are rudimentary and gland-like (*fig.* 1.).

I received fine specimens of *P. ignea* last December from Mr. Ingram, of High Street, Southampton, and from their striking resemblance to *P. brevituba* in every thing except size, and the slight difference above described in the petaline filaments, I can hardly doubt that the two species are frequently confounded. It may indeed be questioned whether they are really distinct.

Fig. 1. represents a longitudinal section of *P. attenuata*, taken from a specimen that flowered in Mr. Knight's Nursery; the lower part of the tube is forced open, so as to have an appearance of distension by no means natural to it, in order to shew distinctly the interior, with the bases of the stamens. A. is the base of the flower of *P. ignea*, with the sepals and petals cut away. B. is the base of a sepaline filament of *P. brevituba*, shewing the processes.

In Mr. Herbert's Monograph of Amaryllidaceæ, the cultivator will find a multitude of invaluable directions as to the proper management of that beautiful tribe of plants; and what renders such remarks the more acceptable to the horticultural world, is their being invariably the result of long personal experience. The following memorandum upon the habits and consequent treatment of Phycella, may be taken as an example:—

"Some years ago I planted three species of Phycella out of doors in front of a green-house, throwing a small heap of sawdust over them in winter. In that situation one of them flowered early in the summer, and they go to rest in the hot dry season. They are tempted by mild weather to push their leaf in the winter, in which case they suffer injury from severe frosts that may ensue, though they will endure a good deal; and their habit is to flower after the leaf has acquired its growth before they go to rest. The Phycellas have been found difficult to cultivate, because they have been often set in peat, though they grow naturally in a sandy or strong soil on a dry rocky substratum, and proper rest has not been allowed them. They should be planted in light soil well drained, and be left dry from the moment their leaves show a disposition to wither, till the bulbs on examination show a disposition to push out fresh fibres at their base. The old fibres in this genus seem always to perish before the plant vegetates again; it cannot therefore be injurious, and may be advantageous, to take the bulbs out of the ground when the leaves perish, and set them again when they are disposed to move. They will be best preserved while at rest in dry sand. I consider that Phycellas should begin to grow in February, and go to rest in August. If the leaf endures later than August, they should have six months rest before they are watered again. A sunny aspect, at the foot of a south wall, appears to suit them."

...y J Ridgway 169 Piccadilly Ap.1. 1837.

DELPHINIUM Barlowii.

A Garden Variety.

This Delphinium presents to the eye the most gorgeous mass of deep lapis-lazuli blue that I am acquainted with in the vegetable kingdom. My attention was attracted by it in the rich collection of hardy herbaceous plants in the nursery of the Messrs. Rollissons of Tooting, where the drawing was made. It is quite impossible to describe, without an appearance of exaggeration, the effect of several plants growing in a cluster, and well backed up by species whose colours harmonize with the blue.

Messrs. Rollissons have obligingly furnished me with the following memorandum respecting this variety :—

"We received the Delphinium from a friend at Manchester several years ago, under the name of 'Delphinium Barlowii,' and we believe it to have been raised by a florist of that name in the neighbourhood of Manchester; undoubtedly it is an hybrid production, and we think the parents to be Delphinium grandiflorum and Delphinium elatum, partaking in growth and flower of the character of both.

"It is a most ornamental and beautiful herbaceous plant, and very easy of cultivation; it appears to flourish in every soil and situation. We have had plants in bloom throughout the whole of summer and autumn; the principal stems sometimes attaining the height of seven and eight feet, and much branched.

"We have sold plants of it to most of the nurserymen in Great Britain. It is known also under the name of Delphinium phœniceum."

Note upon MORNA *nitida*, fol. 1941.

I am indebted to Robert Mangles, Esq. for the following note upon this charming plant, by his gardener, Mr. Donald Mackay. It reached me too late for insertion sooner.

"The seeds were imported along with many others from Swan River colony, in the beginning of 1836, by Mr. Robert Mangles, sown the 2nd of February, 1836, in rich light mould, potted separately, and repotted as often as the roots made their way through the bottom of the pot. The plants attained the height of two feet, began blooming in June, and continued gay nearly three months; they ripened seed sparingly, the leaves turned brown, and they soon ceased to exist. The species is only annual, and requires the ordinary treatment of greenhouse annuals.

"I have raised some plants from a September sowing, which are just potted off and doing well; from them I expect early bloom and abundance of seed, which will be the more acceptable, as there is no fear of its proving a very gay addition to the flower garden in summer."

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* LACHENÁLIA pállida; *var.* cœrulescens.

Blue-flowering pallid Lachenalia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ (§ SCILLEÆ, *Lindl.;* ASPHODELEÆ HYACINTHINÆ, *Endlicher).*

LACHENALIA. *Suprà, vol.* 4. *fol.* 287.

L. pallida. *Suprà vol.* 16. *fol.* 1350.

This, like all the genus, is a native of the Cape of Good Hope, where the species occupy the situation of the Blue-bells and Squills of Europe. It is described, and its synonyms arranged, at the place above quoted.

The Honourable and Reverend Wm. Herbert, who sent me the accompanying figure, remarks that there are three distinct states of this species; one, the present, which has clear blue flowers, without any yellow; a second, figured at fol. 1350; and a third, with spotted leaves. A fourth, I presume, is the variety figured at fol. 314; which, however, may be a distinct species.

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* See folio 1350.

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* PENTSTÉMON breviflórus.

Short-flowered Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARIACEÆ.
PENTSTEMON.—Suprà, vol. 13. *fol.* 1121.

P. *breviflorus;* foliis lanceolatis serratis glabris summis sessilibus, paniculâ laxâ brachiatâ, calyce pubescente, corollæ labio superiore lineari arcuato emarginato villoso inferiore deflexo 3-partito tubo calyce breviore.

Radix *perennis.* Caules *erecti, glabri, brachiatim ramosi, glauci.* Folia *ovato-lanceolata aut lanceolata, plana, glabra, serrata aut dentato-serrata;* caulina *brevissimè petiolata;* summa *sessilia; in ramulis lateralibus nunc omnia linearia serrulata et integerrima.* Flores *in apice ramulorum bini terni quinative, imò solitarii prope fastigium paniculæ.* Calyx *glanduloso-pubescens, ovatus, æqualitèr quinquefidus; dentibus acutissimis.* Corolla *parva, albida, rubescens;* tubo *calycis longitudine infundibulari;* labio superiore *lineari, emarginato, arcuato, rubescente, dorso glanduloso-villoso;* inferiore *breviore, 3-partito, laciniis albis, sanguineo-venosis, lateralibus revolutis, intermediâ breviore.* Stamina 4 fertilia *basi incrassata villosa, prope basin tubi inserta, labio superiore appressa,* antheris *glabris subrotundis: lobis basi divergentibus;* sterile *filiforme, in labium inferius incumbens, glabrum, fauce paulò longius.* Stylus *filiformis, glaber;* stigma *integerrimum.* Capsula *ovata, acuta, glabra, calyce paulò longior, septicido-bivalvis;* valvulis *apice integris.*

A Californian perennial, raised in the garden of the Horticultural Society from seeds picked off some of Mr. Douglas' dried specimens. In its native country it appears to be a stout branching plant, bearing a profusion of small, white and purple flowers: but when cultivated it has been found so tender and difficult to manage, that little of its native beauty is developed.

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* See folio 1245.

It is apparently hardy, and during the summer grows pretty freely in peat and loam, flowering in September, and striking without much difficulty from cuttings. But in the winter the plants thus obtained have uniformly perished, so that two puny specimens are all that now remain.

1947.

del. J. Watts sc.

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1947

* LÆLIA ánceps; *var.* Barkeriana.

Mr. Barker's variety of Lælia anceps.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § EPIDENDREÆ.
LÆLIA. *Suprà, vol.* 21. *fol.* 1751.

L. anceps. *Suprà l. c.*
Var. *Barkeriana ;* sepalis petalisque subæqualibus, labelli lobo medio angusto acutissimo.

A native of Mexico, whence it was procured by Messrs. Lowe and Co., as I am informed by George Barker, Esq. of Birmingham, who favoured me with a specimen and drawing from his rich collection in December last. I believe it to be common in some parts of that country, and that considerable quantities have been recently imported.

It is, in general appearance, like *Lælia anceps;* from which it differs in two of the opposite ribs of its four-angled pseudo-bulbs being smaller than the other two; in its petals being so much narrower as not to differ materially in size from the sepals; and in the middle lobe of the lip being both narrower and sharper. Mr. Barker tells me, that when the flower first opened, the lilac of the sepals and petals was lighter, and possessed the transparent character of Cattleya labiata, but in a more striking degree.

I do not, however, think these differences will justify its being considered more than a striking variety of Lælia anceps.

It will, doubtless, be easily cultivated upon the same plan as the Cattleyas.

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J. Watts sc.

* CHRYSEIS compacta.

Dwarf Chryseis.

ICOSANDRIA? *POLYANDRIA? TETRAGYNIA.*

Nat. ord. PAPAVERACEÆ.
CHRYSEIS. *Suprà, vol.* 14. *fol.* 1168, sub Eschscholtzia.

C. *compacta;* caule denso humili ramoso, foliorum segmentis lineari-cuneatis apice tridentatis, pedunculi cyatho infundibulari: limbo maximo planiusculo.

This plant seems to stand in much the same relation to *Chryseis californica* and *crocea*, as those to each other; that is to say, if they are distinct, so is this; but if they are varieties only of one species, this must be reduced to that species also.

It differs from both of them in having a much more dwarf compact habit, the segments of the leaves very slightly toothed, instead of deeply lobed, and in the flowers being far smaller. From *C. californica* it is distinguished by the limb of its calyx-cup being much broader and slightly undulated, while it is much less undulated than that of *C. crocea.* In the plate, *fig.* 1. belongs to *C. compacta; fig.* 2. to *C. crocea;* and *fig.* 3. to *C. californica.*

With respect to the generic name, which, it will be perceived, is altered from Eschscholtzia to Chryseis, I beg to insert the following note from a botanical friend, on whose correct judgment I place great reliance:—

"It is surprising that so great a violation of an established botanical rule, as is contained in the generic name Eschscholtzia, should have been so long permitted to remain. The rule to which we refer, is, that two different genera

* Chrysēis a celebrated Homeric beauty; the name allusive to the golden colour of the flowers.

should not both be named in honour of the same individual, or of the same family. Thus, for example, the name *Linnæa* must be held to commemorate both the elder and the younger Linnæus, and it would not be allowable to establish a different genus "*Linnæa*" in honour of the latter. It is evident that nothing but confusion would arise from neglecting a rule of such plain utility.

"Now, in the present case, the generic name Eschscholtzia has been previously appropriated to a genus among the Labiatæ, and dedicated to the memory of Eschscholtz, *senior*; this genus has been universally received, among others by Mr. Bentham, in his recent arrangement of the Labiatæ; and consequently the same name cannot be applied with any propriety to designate a different genus of the order Papaveraceæ, in commemoration of his son Eschscholtz, *junior*, the botanist who accompanied Kotzebue in his voyage round the world. It is true that we find the former name spelt *Elscholtzia* in botanical works, which appears to make a difference between them; but this has no better foundation than an error of the press; the two individuals to whom the genera are dedicated standing to each other, as we have already remarked, in the relation of father and son. It is time, therefore, that this anomaly should be removed from our nomenclature, and that the name should be preserved to the plant to which it was originally appropriated.

"The beautiful genus to which the subject of this plate belongs, was first discovered by Menzies in Vancouver's voyage. It might, therefore, with propriety have been named *Menziesia*, had not that name been pre-occupied."

Unwilling as I am to become a party to change in the established names of plants, in consequence of the great inconvenience to which it generally leads, I cannot but feel that the foregoing observations are unanswerable; and I have the more willingly acted upon them, because I anticipate little objection to the substitution of so harmonious a word as Chryseis, for the barbarous combination of conflicting consonants in the word Eschscholtzia.

1949.

...dgway 169 Piccadilly Ap. 1. 18..7

S. Watts sc.

* PHLOX Drummondii.

Mr. Drummond's Phlox.

PENTANDRIA *MONOGYNIA.*

Nat. ord. POLEMONIACEÆ.
PHLOX. *Suprà, vol.* 1. *fol.* 68.

P. *Drummondii;* annua, patentìm pilosa, erecta; foliis oblongis acutis aristatis basi subcordatis semi-amplexicaulibus infimis subspathulatis, floribus corymbosis, calycis laciniis subulatis acuminatissimis reflexis corollæque tubo (calycis tubum ter excedente) hirsutissimis. *Hooker in Bot. Mag. t.* 3441.

An annual Phlox is indeed a novelty; every species of that beautiful genus previously described being perennial. In this instance the novelty is accompanied by a degree of beauty which is hardly equalled by any annual in cultivation.

The flowers are either light, or deep carmine, on the inner surface of their corolla, and a pale blush on the outside, which sets off wonderfully the general effect. A bed of this plant has hardly yet been seen; for it is far *too* precious and uncommon to be possessed by any one, except in small quantities; but I have had such a bed described to me, and I can readily believe that it produced all the brilliancy that my informant represented.

Being an annual, it will only be propagated by seeds; and, unfortunately, the unusual wetness of last autumn was exceedingly unfavourable to their ripening. I have no doubt, however, that one fine dry season will render the plant common and accessible to every one.

* See folio 1351.

It is a native of Texas, whence it was sent to Sir William Hooker, by the late Mr. Thomas Drummond, in 1835.

Fig. 1. represents a corolla cut open, to shew the insertion of the stamens; 2. is an ovary cut across, together with a cup-like disk in which it is seated; 3. is the calyx opened out, to shew the pistil; and 4. is a very highly magnified view of one of the hairs that so thickly clothe the calyx; the surface of the hair is thickly studded with minute elevated points, a circumstance by no means common.

Miss Drake del.

Pub by J. Ridgway 169 Piccadilly Apr. 1837

* GESNÉRA lateritia.

Brick-red Gesnera.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. GESNERACEÆ.
GESNERA. *Suprà, vol.* 4. *fol.* 329.

G. *lateritia*; herbacea, foliis subrotundo-ovatis cordatis rugosis crenatis hirsutis, floribus axillaribus solitariis terminalibusque geminatis, bracteis sessilibus amplexicaulibus planis, corollis tomentosis labio superiore oblongo concavo bilobo inferiore truncato.
G. Selloi. *Hort. nec Martii.*

This is the plant to which I adverted, fol. 1785, in comparing *G. faucialis* with *G. Selloi*; but upon comparing it with the *G. Sellovii* of Martius, I find it is a very different plant, and in fact a mere garden misnomer.

G. Sellovii is related to *G. macrostachya*, fol. 1202, and *allagophylla*, fol. 1767, while this forms one of the set of *G. bulbosa*, which is plainly distinguished by the oblique orifice of the corolla, the long emarginate upper lip, and the very small lobes of the lower lip. It is most nearly allied to *G. faucialis*, from which it differs in the leaves being more round, the flowers smaller, the flower-stalks longer, the base of the upper lip of the corolla as wide as its apex, the narrow orifice of the tube, and the truncated narrow middle lobe of the lower lip.

A native of Brazil, whence it was received by the Horticultural Society, in whose garden the drawing was made in June, 1834. It is a stove plant, readily cultivated in peat and loam.

* See fol. 1158.

Ridgway, 160 Piccadilly Ap. 1. 1837.

* TRICHOCÉNTRUM fúscum.

Brown-flowered Trichocentrum.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.

TRICHOCENTRUM. *Pöppig Nova Gen. & Sp. Pl.* 2. 11. *Perianthium* patens, liberum, æquale. *Labellum* sessile, cum basi columnæ connatum, calcaratum, planum, bilobum, basi lamellosum. *Columna* nana, semiteres, crassa, utrinque alata. *Anthera* bilocularis, mutica. *Pollinia* 2, complicata; *caudiculâ* cuneatâ; *glandulâ* minutâ.——Herbæ *epiphytæ Americanæ acaules;* foliis *planis (aut nullis?);* floribus *radicalibus.* Genus *Æceocladi* proximum, labello cum columnæ continuo et subconnato, necnon columnâ nanâ utrinque alatâ, diversum.

T. *fuscum;* foliis oblongis acutis obliquè tortis racemo longioribus, labello glabro bilobo basi bilamellato venis quibusdam callosis, alis columnæ serratis.

Acoidium fuscum. *Mihi in hortis.*

Imported from Mexico by Mr. Knight, of the King's Road, from whom I received it in flower in July of last year. Shortly after it was sent me by Mr. Bateman. It is a stove epiphyte, and apparently by no means of difficult cultivation.

When I first received it the genus had not been distinguished, and I called it *Acoidium fuscum*, from ακοη, an ear, in allusion to the two ears of the column; but Mr. Pöppig having subsequently figured and described a second species under the name of *Trichocentrum pulchrum*, the former must give way.

* From θριξ τριχος a hair, and κεντρον either a spur or a centre; but the applicability of the word is not apparent, nor is it explained by its author, Mr. Pöppig.

As a genus, *Trichocentrum* must rank next to *Æceoclades*, from which it principally differs in having the labellum united at the base with the column, and in the latter having two ears or wings. It is also close upon *Angræcum* and *Mystacidium*, with which it agrees in habit, but from which it is abundantly distinct.

To the two species now admitted into the genus *Trichocentrum*, must, I think, be added, as a third, the *Limodorum* funale of Swartz, a very curious *leafless* Jamaica epiphyte, which no modern botanist seems to have met with alive, and which I only know from Swartz's description. He states it to grow upon old trunks of trees on the mountains of Jamaica, emitting numerous, simple, stiff, thick, pale green roots, from two to three feet long, and having, in the spring, large whitish flowers in pairs. This plant ought to be sought for again; if it were not found, there would be other species to reward the trouble of the traveller, for I see there are not fewer than twenty species of Jamaica epiphytes described by Swartz, of which none have as yet reached England alive; not to mention the Cymbidium utriculatum, a terrestrial species inhabiting moist woods on the island, having a tuber *as large as the largest potatoe*, a scape about two feet high, Calanthe-like leaves, and pretty large (majusculi) white succulent flowers.

raKe. del.

Pub by J. Ridgway 169 Piccadilly 1837.

J. Watts sc.

MONACHANTHI ET MYANTHI cristati

proles biformis.

In November, 1836, His Grace the Duke of Devonshire was so kind as to put into my hands the extraordinary flower represented in the accompanying plate, which may be regarded as one of the greatest curiosities that our gardens ever produced. Accustomed, as Botanists now are, to the freaks and masqueradings of Nature, and to the strangest departures from all rules, at every step among Orchidaceous plants, there is certainly nothing upon record to be for a moment compared with the case before us. It is that of a plant of *Myanthus cristatus* changing into a *Monachanthus*, related to *Monachanthus viridis*, and combining in its own proper person no fewer than three supposed genera, *Myanthus*, *Monachanthus*, and *Catasetum*.

I doubt very much whether any one would have believed in the possibility of such transmutations upon weaker evidence than that I am about to produce. At least, for my own part, I am much in the position of the person who, upon being assured of the truth of an improbable story, exclaimed, "Why, Sir, I would not believe it if I saw it myself." I am the first Botanist who ever witnessed any of these changes; my observation was put upon record several years ago, and yet, when I read it again in 1833, I really believed I must have been mistaken, and doubted my own positive testimony. In this very Botanical Register, vol. xii. fol. 966, in April, 1826, is the following note under Catasetum cristatum:—

"The unimportance of the peculiarity which exists in the labellum (namely, its flattened or fringed and crested state) is manifested in a singular manner by a curious monster of this plant, which we have observed on an individual in the Horticultural Society's garden. Among flowers of the ordinary structure two or three others were observed, in which the labellum was precisely of the same nature as that of Cata-

setum tridentatum; that is to say, destitute of the crested appendage, and perfectly galeate and naked."

This, I repeat, appeared to me so extraordinary a statement, especially as after seven years it had never been corroborated by any other case of the same kind, that I concluded I must have made some mistake, and I accordingly formed the genus *Myanthus* out of a species nearly allied to the very Catasetum cristatum, which, in 1826, I had seen sporting back to C. tridentatum.

Not content with this, I added the genus *Monachanthus*, distinguishing it from Catasetum by the want of cirrhi on its column, and by its perianth being turned back; and when the original species, *M. viridis*, was sent me from Wentworth, previously to publication in this work, fol. 1752, I felt no doubt of its being an entirely distinct plant. Even when Lord Fitzwilliam assured me that it was beyond all doubt an accidental sport of *Catasetum tridentatum*, I still adhered to my idea that an imported plant of *Monachanthus viridis* had been accidentally taken for the latter common species. Nor do I think that as a Botanist I was to be blamed for these errors: the genera being founded upon characters which were apparently important, and which most assuredly no one could, *à priori*, have suspected could pass into each other in the manner that has now been seen. If, however, it should be thought that I ought to have been aware of such metamorphoses, I at least have lost no time in acknowledging the mistakes, and putting others on their guard against them for the future.

With regard to the particular case now before us, Mr. Paxton has furnished me with the following note:—

"The monster sent by his Grace the Duke of Devonshire, was produced on a plant of Myanthus cristatus, which also produced a perfect spike of Myanthus cristatus at the same time; the same plant has flowered twice before, but did not sport: a high state of cultivation appears to favour the production of monsters of this kind. There are more than twenty plants of Myanthus barbatus at Chatsworth, which are almost all different in colour, but none of them have yet

sported; there are also, at least, twenty plants of Monachanthus discolor, which keep true. Mr. Hillhouse (a gentleman residing in Demerara), has informed the Duke of Devonshire that a flower spike of Catasetum often has on it several distinct kinds of flowers."

To make the reader more distinctly aware of the changes that the flowers of this specimen exhibit, I will describe one of those of the species in its ordinary state.

It has narrow, ovate, lanceolate, green sepals, of which the two lateral ones are placed obliquely on each side of the lip; the petals are narrow, spotted with red, and placed almost in front of the upper sepal; the lip is a narrow, flattish, fleshy body, having a sac or conical depression (*fig*. 4. *c*.) in its middle, a large, curved, white, fleshy horn (*fig*. 4. *b*.) projecting forwards from its base, and a row of stiff, short, fleshy teeth standing up all round the edge. The column has a long horn rising up from its back, and forming a narrow bed for the anther, while two other horns or cirrhi (*fig*. 4. *a*.) hanging downwards over the lip.

In other flowers, which may be said to exhibit the extreme of difference, the sepals and petals are all equally spotless, of the same short, ovate, obtuse figure, and spread equally round the column; the lip is a fleshy hood-like, or helmet-like, greenish yellow body, a little turned back at the point, entirely without sac, horn, or marginal teeth, and standing erect so as to overshadow the column. The column itself has an exceedingly short horn at the back, and no cirrhi in front. I think I may safely say, that until these two sorts of flowers had been seen on the raceme, no Œdipus could have guessed them to belong to either the same species, or even genus.

The way in which they pass into each other is sufficiently curious, as far as regards the lip. All the fringe-like teeth of this organ disappear, except a few at the base on one side (*fig* 3. *a*.), the curved horn shortens (*fig*. 3. *b*.), and the remainder contracts about the sac, which widens and deepens till the commencement of a helmet is shadowed out. In another case all the fringes disappear except a few minute

bristles (*fig.* 1. *a.*), the lateral cirrhi are not formed, the curved horn is wanting, and the helmet-like form in the lip is completed. All these transitions were perfectly shewn in the Duke of Devonshire's specimen, and have been faithfully copied by Miss Drake. On the same specimen was also a case of a flower with two lips, as is represented at *figure* 2.

The necessary consequence of this is, that the supposed genera *Myanthus* and *Monachanthus* must be restored to *Catasetum*, and I have no doubt now, although no proof has been seen of it, that *Mormodes* must share the same fate. But which of the species have their masks on, and which shew their real faces, I certainly will not at present presume to guess.

Mr. Schomburgh has lately sent to the Linnæan Society, from Demerara, a specimen of another Monachanthus, sporting to a crested Myanthus; of which, I presume, some account will in due time be published. And I am acquainted with the following example of this tendency in a very different genus.

In August 1836, Mr. Willmer, of Oldfield, near Birmingham, sent me a specimen of a Cycnoches, which had broad petals, a short column, hooded and dilated at the apex, and a broad roundish lip, gibbous at the base, and with its stalk much shorter than the column. It was, however, destitute of scent, while Cycnoches Loddigesii has, as is well known, a delicious odour of Vanilla. I had no doubt of its being distinct species, and called it *C. cucullata*. But in the autumn of 1836, in the garden of the Horticultural Society, a plant of Cycnoches produced from the opposite sides of the same stem two racemes; those of one raceme were the well-known fragrant flowers of Cycnoches Loddigesii, and of the other the scentless flowers of the new C. cucullata.

Miss Drake del.

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J. Watts sc.

* GARDÉNIA pánnea.

Cloth-leaved Gardenia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CINCHONACEÆ, § GARDENIEÆ.
GARDENIA. *Suprà, vol.* 1. *fol.* 73.

G. *pannea;* inermis, foliis densè hirsutis rugosis oblongis acutis basi obtusis brevè petiolatis, floribus terminalibus aggregatis in pedunculum communem sessilibus, tubo corollæ longissimo piloso; limbo reflexo intùs tomentoso, calyce 5-dentato glabro.

Frutex, *in caldario 4-pedalis, vix canescens, sed undique ferè hirsutus.* Rami *subtetragoni.* Folia *circiter sex poll. longa, rugosissima, tactu subaspera;* petiolis *brevibus;* stipulis *brevibus, rotundatis, membranaceis, dentatis, glabris.* Calyx *glaber;* tubo *oblongo lævi;* limbo *campanulato, brevi, acutè 5-dentato.* Corolla *straminea, pilosa;* tubo 3 *poll. longo, et ultrà, apice parùm dilatato, tomentoso;* fauce *nudâ;* limbo *contorto, tomentoso, laciniis oblongis, coriaceis, basi subundulatis medio refractis.* Stamina 5, *sessilia, exserta, linearia; antheris post anthesin incurvis.* Ovarium 2-3-*loculare; ovulis numerosis, in placentis carnosis subdidymis immersis. Stylus filiformis;* stigma *clavatum,* 2-3-*lobum.*

A handsome stove shrub, native of the tropical parts of South America, whence it was received some years since by the Horticultural Society.

It flowers in June and July; but like a large number of the woody inhabitants of the tropics, seldom produces its blossoms in this country. The drawing was made three

* Named in compliment to Dr. Alexander Garden, a physician of Charlestown in South Carolina, and a correspondent of Linnæus. He was the discoverer of the Siren lacertina, and is highly eulogized as a botanist and zoologist by his biographer Smith.

or four years since. The dull wrinkled foliage is by no means handsome, and as the flowers are destitute of smell, they have nothing to recommend them beyond their size and curious colour.

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* PERISTÉRIA cerína.

Waxen Dove-flower.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.

PERISTERIA, *Hooker.* *Perianthium* globosum. *Sepala* basi subconnata, concava, basi labello connata. *Petala* conformia, paulò minora. *Labellum* erectum, medio articulatum; dimidio superiore obovato, truncato, medio pulvinato, inferiore bilobo columnâ continuo. *Columna* erecta, semiteres, basi magnâ dilatatâ. *Anthera* ecristata, bilocularis. *Pollinia* 2, posticè fissa, glandulâ sessili nudâ rostellum involvente.——Herba *subterrestris, pseudo-bulbosa.* Folia *plura, plicata.* Scapi *vaginati, radicales, multiflori.* Flores *speciosi.* Lindl. gen. et sp. Orch. p. 160.

P. *cerina;* scapo brevi pendulo, racemo denso, labelli lobo medio margine crispo, columnâ apterâ.

Pseudobulbus *oblongus, vel ovatus, atro-viridis,* 3-*pollicaris, apice* folia 3-4 *gerens, oblongo-lanceolata, plicata, basi vaginantia, pedalia et ultrà.* Scapus *brevis, vaginatus, pendulus, rigidus,* racemo *denso,* 9-10-*floro, secundo onustus.* Sepala *et* petala *colore et texturâ ceræ lutescentis, immaculata, obtusa.* Labellum *trilobum, cum basi productâ columnæ articulatum, ejusque faciei appressum; lobis lateralibus ovatis, acutis, planis, intermedio abruptè inflexo, ovato, emarginato, margine crispo et croceo, cæterum colore sepalorum.* Columna *crassa, ovata, semiteres, aptera.* Pollinia 2, *biloba, in glandulam triangularem sessilia.* Flores *juniperum spirant.*

A new species of the curious genus Peristeria, imported from the Spanish Main by Mr. Knight of the King's Road, in whose Nursery the accompanying figure was made in June last.

It is allied to the *P. pendula* of the Botanical Magazine, from which it differs in its spotless, smaller flowers, in the crisped border of the middle lobe of the labellum, and especially in the absence of wings from the column. This latter

* From περιστερα a dove: the column in the original species, *P. elata,* resembles a dove hovering with expanded wings.

circumstance brings the genus *Peristeria* extremely near *Maxillaria Warreana* on the one hand, and *Maxillaria cristata* on the other.

The flowers have a strong smell of Juniper.

Fig. 1. is a side view of a column and lip; shewing how the middle lobe of the latter is bent inwards, so as to press against the face of the column. *Fig.* 2. a front view of the column. *Fig.* 3. the pollen masses with their glands.

Miss Drake. del.

Pub by J. Ridgway 169 Piccadilly May 1. 1837

* PLATYSTIG'MA lineåre.

Linear-leaved Platystigma.

POLYANDRIA *TRIGYNIA.*

Nat. ord. PAPAVERACEÆ.

PLATYSTIGMA. *Sepala* 3-4, ovata, caduca, pilosa. *Petala* 6-8. *Stamina* numerosa. *Filamenta* filiformia. *Antheræ* lineares, biloculares, lateraliter dehiscentes. *Stigmata* 3, ovata, acuta, erecto-divergentia. *Capsula* oblonga, basi attenuata, 1-locularis, 3-angularis, 3-sulcata, 3-valvis, ab apice ad basin dehiscens: valvulis conduplicatis margine in placentis filiformbus productis. *Semina* numerosa, minuta, ovoidea, nigra, lævissima, nitida. *Bentham in Hort. Trans. n. s. vol.* 1. quibusdam mutatis.

P. lineare. *Bentham l. c. Hooker Ic. vol.* 1. *t.*

Annua. Caules *densi, subsimplices, teretes, patentim pilosi, fragiles,* 3-4 *poll. alti.* Folia *linearia, opposita, aut ternatim verticillata, tenera, patentim pilosa.* Pedunculi *solitarii, axillares et terminales, gracillimi, caulibus duplò longiores, patentim pilosi.* Calyx *deciduus Papaveris more, viridis,* 3-4-*sepalus, pilosus.* Petala *serie duplici verticillata,* 6-8, *concava, ovata, subæqualia; exteriora lutea, interiora alba.* Filamenta *linearia, utrinque infra apicem dentata.*

One of the prettiest of all little annuals, with its graceful cups of white and yellow, resembling those of a Ranunculus, but far more gay.

It is a native of California, where it was originally found by Douglas, who however sent home no seed. More recently it has been received at St. Petersburgh from the Russian settlements in California, and thence it has found its way to England. I fear, however, our damp summers will prevent its ripening seed with any certainty.

Fig. 1. is a magnified stamen; 2. an ovary, with the three stigmas; and 3. a transverse section of the ovary, shewing the position of the placentas, with respect to the angles.

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* From πλατυς broad, and stigma.

Note upon PHLOX *Drummondi*, fol. 1949.

Phlox Drummondi never ripens seed with me, but it is easily multiplied and perpetuated by pipings in sand on a warm flue. A piping from the flowering umbel makes as good a plant as any other part of it, though it may have only flower-buds when set.

Wm. Herbert.

Pub by S. Ridgway 169 Piccadilly [illegible]

J. Watts sc.

* CLÉMATIS cœrúlea.

Violet Clematis.

POLYANDRIA *POLYGYNIA.*

Nat. ord. RANUNCULACEÆ.
CLEMATIS. *Suprà, vol. 2. fol.* 97.

§ II. VITICELLA. *D. C. prodr.* 1. 8.

C. *cœrulea* ; patentim pilosa, foliis ternatis segmentis ovatis acutis integerrimis, pedunculis unifloris, sepalis sex oblongo-lanceolatis acutis membranaceis margine distantibus.
C. cœrulea grandiflora. *Hort.*

This is a charming addition to the climbers cultivated in England ; it has a most graceful mode of growth, and the large violet flowers, with deep purple stamens, are more ornamental than those of any species of Clematis yet in this country.

It is nearly related to *C. florida*, from which it differs not only in the colour, delicacy, and transparency of its blossoms, but also in its leaves being only once ternate, and in the sepals not touching and overlapping each other at the edges.

The drawing was made last October, from a plant belonging to Messrs. Lowe and Co. of Clapton, to whom a medal had been awarded for it at one of the meetings of the Horticultural Society in Regent Street.

Messrs. Lowe and Co. inform me, that it is, like C. florida, a native of Japan, from which country it was introduced to the European gardens by Dr. Van Siebold, and they have no doubt that it will prove as hardy as that

* See folio 1234.

species. It is a free growing and profuse blooming plant, and will prove a great accession to our hardy climbers. They received this species with another very distinct one, called Bicolor or Sieboldi, from Belgium in the spring of 1836.

The name is, I presume, an unpublished one of Dr. Siebold, the great modern investigator of the noble flora of Japan. Systematic Botanists should compare it with the *C. Cadmia* of Hamilton, from Majahur.

1956.

* STRANVÆSIA glaucéscens.

Grey-leaved Stranvæsia.

ICOSANDRIA *PENTAGYNIA.*

Nat. Ord. Rosaceæ § Pomeæ.

STRANVÆSIA. *Calyx* 5-dentatus. *Petala* 5, concava, sessilia, patentia, basi villosa. *Stamina* 20, patula. *Ovarium* villosum, superum, 5-loculare; *ovulis* cuique loculo binis. *Styli* 5, subconcreti, apice liberi, *stigmatibus* totidem compresso-reniformibus. *Fructus* sphæricus, clausus, includens capsulam superam, quinquevalvem, osseam, fragilem, loculicido-dehiscentem. *Semina* oblonga, compressa; *testâ* cartilaginea; *radiculâ* exsertâ.——Arbores *sempervirentes, Asiæ temperatæ.* Folia *simplicia.* Flores *corymbosi.*

S. *glaucescens;* foliis lanceolatis coriaceis serratis basi acuminatis subtùs ad costam petiolo ramisque junioribus floccoso-villosis, corymbis sublanatis, pedicellis alabastro bisterve longioribus.

Cratægus glauca. *Wallich. Cat. no.* 673.

Arbor *mediocris, sempervirens, atroviridis, subglauca; ramis purpureis junioribus tomentosis adultis glabriusculis.* Folia *coriacea, parùm nitida, lanceolata, acuta, serrata, basi acuminata, subtùs ad costam petiolumque villosa.* Corymbi *multiflori, densi, albi, floccoso-villosi.* Calyx *lanatus, 5-dentatus.* Petala *oblonga, emarginata, concava, patentia, basi villosa.* Stamina 20, *inæqualia, dentibus calycis longiora.* Ovarium *superum, tomentosum, 5-loculare loculis dispermis.* Styli 5, *apice tantum liberi, glabri,* stigmatibus *compresso-reniformibus.* Fructus *parvus, sphæricus, aurantiacus, dentibus calycis clausus, pubescens.* Capsula *inclusa, subpubescens, ossea, fragilis,* 5-*locularis,* 5-*valvis, valvulis medio septiferis ab axi solubilibus.* Semina *compressa,* testâ *cartilagineâ vestita;* radiculâ *exsertâ.*

It is about eleven years since the first plant of this new evergreen was first brought to England by Dr. Wallich, and placed in the Garden of the Horticultural Society, under the name of Cratægus glauca, by which it has been extensively distributed. Its native countries are the provinces of Nepal and Kamaon.

In the neighbourhood of London the species is scarcely more hardy than a myrtle; but it grows very well against a wall where it is protected, and in such a situation it flowers in the month of June. In warmer counties I have no doubt that it will prove a valuable evergreen. The worst part of its habit is its pushing early in the spring; which exposes it to be damaged by frosts; and this seems to happen to it in its native country, if we can judge from the dried specimens distributed by the East India Company, all of which, when in flower, evidently have the leaves injured by frost, or some such accident. Its leaves are something like those of *Photinia integrifolia*, with which it was mixed in Dr. Wallich's distribution of dried specimens; its serrated leaves will however readily distinguish it.

It takes by grafting, or budding upon the common thorn, and may now be procured without difficulty in the Nurseries under the name of Cratægus glauca.

As a genus this is one of the most remarkable in the Pomeous suborder of Rosaceæ, in consequence of its truly capsular 5-valved fruit, resembling a pome, only so far as the fleshy calyx is concerned. On this account it bears the same relation to other Pomeæ as Gaultheria to Vaccinium. It is true, that in some other Pomeous genera the pericarp is dry, while the calyx tube only is fleshy, as Cotoneaster and Photinia. But in none of them is there any tendency to a separation of the carpels into valves.

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* The Honourable William Fox Strangways, F.R.S., is so well known in this country for a learned and indefatigable investigator of the Flora of Europe, as to render superfluous any justification of the name now proposed for a most distinct and remarkable genus.

Fig. 1. represents a calyx, with the stamens and styles, much magnified; 2. a petal; 3. a section of the ovary; and 4. a section of the ripe fruit.

Notwithstanding that the plants of Pomeous Rosaceæ have undergone examination from several Botanists since the year 1820, when I first revised them, yet I find so little original criticism upon the genera and their characters, that I am tempted to avail myself of the present opportunity of offering a few additional remarks :—

Eriobotrya. It is not improbable that Photinia dubia may belong to this genus: it varies with three styles, and probably with a greater number. Nothing can decide the point except its ripe seed, which I have never succeeded in procuring. Its habit is that of Eriobotrya. *Eriobotrya? cordata*, and *E. obtusifolia* do not belong to the genus; they are much nearer Cotoneaster, having subparietal carpels. But their petals are longer than is usual in Cotoneaster, and there is only one ovule in each cell. I therefore think they may be safely separated as a peculiar genus, to which the name of Hesperomeles (or Western Apple) will not be inappropriate.

Hesperomeles. *Calyx* brevis, rigidus, valdè apertus, 5-dentatus. *Petala* concava, dentibus calycis longiora. *Stamina* 20, dentium calycis longitudine. *Carpella* 5, calycis tubo adnata, glabra, angulis interioribus libera, unilocularia, *ovulis* solitariis; *styli* 5, distincti, glabri. *Fructus* ignotus.——Frutices *peruviani*.

1. H. cordata=Eriobotrya? cordata. *Lindl.*
2. H. oblonga; foliis oblongis rugosis supra glabris subtus ferrugineo-villosis, cymis lanatis foliis brevioribus. *Peru, Mathews, no.* 888.
3. H. obtusifolia=Eriobotrya obtusifolia. *D. C.*
4. H. cuneata; spinescens, foliis cuneatis apice subtrilobis incisis supra nitidis utrinque glabris, corymbis pubescentibus terminalibus foliis brevioribus, petalis calvis. *Peru, Mathews, no.* 577. Fructus ex descr. Mathewsii parvus rotundus ruber.

Photinia. This must be divided into two sections, until an examination of the fruit of the second section shall shew whether it is not rather a separate genus.

Sect. 1. Euphotinia; *ovario completè biloculari.*

1. P. serrulata. *Lindl.*
2. P. prunifolia (P. serrulata β. *Hooker et Arnott in Beechey's Voyage, p.* 185.). Quite distinct from P. serrulata, in the leaves being glandular on the under side, and differently formed, and in the flowers being much smaller.
3. P. arbutifolia. *Lindl.*
4. P. arguta (Wall. Cat. no. 672); foliis lanceolatis acuminatis argutè serratis glabris, cymis sessilibus paucifloris lanatis, calycis dentibus obtusis membranaceo-marginatis. *Pundua, Wallich.* Fructus ignotus.

Sect. 2. Myriomeles; *ovario semibiloculari.*

5. P. pustulata; foliis obovato-lanceolatis acutis basi acuminatis supra medium serratis lævibus utrinque glabris, corymbis calvis multifloris ramulis pustulatis. *China prope Cantonem, Parkes.——Flores* ignoti. *Pomum* semimaturum ovatum, pisi magnitudine, glabrum, calyce clauso coronatum. *Pericarpium* apice tantum liberum, chartaceum, 2-loculare (v. abortu uniloculare). *Semina* 2-4, testâ coriaceâ submucilaginosâ, acidi hydrocyanici gustu. *Embryo* compressus, radiculâ exsertâ.
6. P. integrifolia. *Lindl.* (Wall. Cat. no. 669. cum fructu Stranvæsiæ glaucescentis commixta) foliis ovalibus nitidissimis utrinque acuminatis glaberrimis, corymbis supradecompositis densis glabris, floribus sessilibus.——I doubt very much whether Dr. Blume's plant of this name from Java, is not quite a distinct species; see *Bijdragen*, p. 1103.
7. P. eugenifolia; foliis oblongis acuminatis integerrimis glaberrimis, corymbis supradecompositis divaricatis tomentosis. *Pundua, Wallich.*

Dubia.

8. P. dubia. *Lindl.* P. bengalensis, *Don*, is not distinct from this.

Raphiolepis. There is an important mistake in the character of the fruit of this genus. The seeds have not a thick leathery testa, as is represented in the Collectanea Botanica, from imperfect materials. On the contrary the testa is tough, thin, and membranous. The embryo is spheroidal, with a distinct chalaza, and two plano-convex cotyledons, within whose base the radicle lies concealed, as in Eriobotrya!

Cratægus lævis and *villosa* of Thunberg are probably referred with justice to Photinia; but I am altogether unable to judge, from Dr. Blume's short characters, where his *Mespilus spiralis*, and *Chinensis* ought to be placed. *P. Sieboldi* of G. Don, the *Mespilus Sieboldi* of Blume, is stated by that author, upon the authority of Dr. Siebold to be the Cratægus villosa of Thunberg.

* CRATÆGUS coccínea.

Scarlet-fruited Hawthorn.

ICOSANDRIA *MONO-PENTAGYNIA.*

Nat. Ord. ROSACEÆ, § POMEÆ.
CRATÆGUS. *Suprà, vol.* 13. *fol.* 1128.

C. *coccinea;* foliis subrotundis oblongisve angulatis inciso-serratis basi cuneatis longè petiolatis, calycis laciniis pinnatifidis petiolisque glandulosis, spinis axillaribus arcuatis petiolis longioribus, pomis sphæricis corymbosis 3-4-pyrenis putamine crassissimo osseo.
C. coccinea. *Linn. Sp. Pl.* 682. *Torrey Fl.* 1. 474. *De Cand. Prodr.* 2. 627. *Loudon Arb. et Frut. Brit. p.* 816.
C. glandulosa. *Willd. Sp. Pl.* 2. 1002. *Loud. Arb. Brit. p.* 817. *De Cand. Prodr.* 2. 627.
β. *macracantha;* spinis foliis æqualibus v. longioribus, pomis subminoribus.
C. glandulosa macracantha. *Suprà vol.* 22. *t.* 1912.
C. macracantha. *Lodd. cat. Loud. arb. Brit. p.* 819. *fig.* 572. *et* 573.

When the long-spined variety of this plant was figured at fol. 1912, it did not occur to me to look very particularly into the synonyms, my object being chiefly to publish a figure of the species under some recognised name; the critical enquiry into the entangled synonymy of the whole genus Cratægus being left for a special discussion by whomever might be disposed so to amuse himself. A note, however, from Dr. Asa Gray of New York, has led me to look a little more particularly into the matter. That gentleman says, " C. *glandulosa β macracantha*, of Bot. Reg. t. 1912, is the most common species in the Northern States, and is here familiar to every one. It is the *C. pyrifolia* Torrey Fl., and as we supposed of preceding authors." Probably *pyrifolia* was written for *coccinea*, for upon turning to Torrey's Flora, I find that excellent Botanist quoting Elliott, Pursh, and Muhlenberg as his authorities for *C. pyrifolia*, which he does not appear himself to have seen: and in my herbarium are excellent specimens of this *C. glandulosa* marked " C. coccinea auct. Amer. C. pyrifolia? common near New York," sent to me by Dr. Torrey himself.

In referring this plant to *C. coccinea* the American Botanists are right, for it is certainly the plant meant by Linnæus. Nor was I wrong in referring it to *C. glandulosa* of De Candolle; for it is as certainly the plant of the Prodromus. It is not, however, *C. glandulosa* of Aiton, which was probably intended for *C. spathulata*, figured at fol. 1890, if we are to judge from its being compared in the Hortus Kewensis with *C. flava* and *parvifolia*. The confusion arose with Willdenow, who, with his usual ingenuity, first copied the specific character of *C. glandulosa* from the Hortus Kewensis, and then added *C. sanguinea* of Pallas as a synonym: hence the latter plant and *C. glandulosa* became identified in the eyes of systematic writers, and a fresh character was contrived to suit the erroneous combination. The genus Cratægus not having been studied by Professor De Candolle himself, the error was transferred to the Prodromus, and has given rise to some most extraordinary confusion in writers who shall be nameless.

The following adjustment of synonyms will help to put this matter straight for the future, to a certain extent at least.

C. *glandulosa* of Willdenow, De Candolle, and Loudon is the same species as *C. coccinea* of Linnæus.

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* See fol. 1161.

C. *sanguinea* of Pallas, referred to *C. glandulosa* by Willdenow, De Candolle, and Loudon, is distinct from *C. coccinea* in its want of glands upon the calyx and petioles, as well as in its country and habit.

C. *glandulosa* of Aiton, referred by Willdenow, De Candolle, and Loudon to *C. coccinea*, miscalled *glandulosa*, is a totally different species, and may be the same as *C. spathulata.*

With Dr. Asa Gray's note above referred to, I received the following criticism upon *C. spathulata*, *fol.* 1890 :—

"I am not convinced of the correctness of the view you take respecting the C. spathulata, *Michx.* and C. Virginica, *Loudon.* I have before me specimens of C. Virginica, *Loudon*, in various states, from North Carolina to Florida; and of the true C. spathulata, as it is considered by N. American botanists (your C. microcarpa), from Georgia, New Orleans, Texas, and Arkansas. The specimens exhibit the various diversities in foliage for which the plant is so remarkable. This species is well known to our botanists, and the reason of its being 'altogether omitted from the Floras of Torrey, Hooker, and Beck,' is that the works alluded to are confined to the botany of the Northern States and British America, whereas the above-mentioned species does not grow North of Virginia. The chief reasons for considering the C. microcarpa, *Bot. Reg.* to be the original C. spathulata are these—

"1. The lower leaves of the plant are almost always fascicled on very short spurs, or abortive branches; corresponding in this particular with the character of Michaux; which can hardly be said of C. Virginica.

"2. The fasciculate leaves are very much smaller than the irregularly-shaped younger ones, which terminate the vigorous branches; smaller, indeed, than those of any other species, thus agreeing with the character '*foliis adultæ* plantæ parvulis.' The small, lucid, and coriaceous fasciculate leaves, of such uniform occurrence in our native specimens, are not represented in Bot. Reg. t. 1846.

"3. The phrase 'foliis longissimè deorsùm angustatis' is peculiarly applicable to this plant, but by no means strikingly so to C. Virginica. They are decidedly spatulate, while in C. Virginica they are obovate or cuneiform.

"4. The leaves are almost always 3-cleft, or deeply 3-toothed at the summit, in *our* C. spathulata; the upper and larger ones being however sometimes undivided, but usually variously lobed; whereas in C. Virginica the leaves are very slightly lobed at the summit, and often undivided.

"*Our* C. spathulata somewhat resembles C. oxyacantha, with which it is compared by Michaux. C. Virginica does not.

"Lastly, I have before me a sketch of two leaves made by Dr. Torrey from the specimens in Michaux's Herbarium, which wholly agree with the ordinary leaves of what we have always considered C. spathulata, viz. your *C. microcarpa*."

To this I answer, that it still appears to me that the synonymy in the Bot. Register is correct, for the following reasons:—

However much Michaux's character of the leaves may appear more applicable to C. microcarpa than to C. virginica, yet it does not *disagree* with the latter, for the terms "fasciculatìm" and "longissimè angustatis" apply very well to some of the leaves of C. virginica; but the remainder of the specific character of Michaux does entirely disagree with C. microcarpa, while it as entirely agrees with C. virginica. "Corymbi pauciflori" cannot be said of a plant which often bears 15 fruits in a cluster, as in wild specimens from Texas now before me; "pedicelli breves" are equally at variance with pedicels half an inch long and slender; while "calyces tomentosi" have no applicability to a plant which is remarkably smooth in its fructification.

But "corymbi pauciflori," "pedicelli breves," and "calyces tomentosi," do exactly correspond with the 1-3-flowered corymbs, almost sessile fruit, and permanently downy calyx of C. virginica. It does not appear whether Dr. Torrey noticed the glandular border so characteristic of C. virginica, when he examined the specimens of C. spathulata in Michaux's herbarium. But, if it really were to prove that a specimen of C. microcarpa is labelled C. spathulata in that collection, I should still prefer the evidence of Michaux's own words, which cannot misrepresent him, to that of a specimen which may have been mislabelled.

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169 Piccadilly

* PHILODÉNDRON crassinérvium.

Thick-ribbed Philodendron.

MONŒCIA *TETRANDRIA.*

Nat. ord. ARACEÆ.

PHILODENDRON. Spatha tota persistens, post florescentiam reclusa. *Spadix* densè obsitus, appendice carens. *Antheræ* singuli floris liberæ. *Ovarium* multi-(5-15-)-loculare, loculis pluriovulatis, ovulis axi affixis erectis.——*Plantæ* Americanæ *tropicæ,* succo *decolori,* rhizomate *in caulem elongatum scandentem v. arborescentem mutato,* foliis *remotis,* vaginis *petiolaribus brevissimis,* stipularibus *elongatis deciduis folio oppositis.* Schott. in Meletemat. p. 19.

P. *crassinervium;* foliis lanceolatis acuminatis costâ crassissimâ inflatâ, spathâ obtusâ cucullatâ apiculatâ spadicis longitudine.

Spadix *apice masculus, basi fœmineus ipso medio neuter.* Flores masculi *nudi, tetrandri;* staminibus *crassissimis, truncatis, extrorsùm lineas duas parallelas discretas polliniferas per rimam longitudinalem dehiscentes gerentibus, initio bilocellatas, demùm confluentes.* Flores neutri *e corpusculis constantes staminibus similibus sed majoribus, minùs densis, et polline orbatis.* Flores fœminei *nudi;* ovarium *truncatum subtetragonum, 5-7-loculare, ovulis in utroque loculo pluribus axi affixis;* stigma *pulvinatum, glutinosum, indivisum, omninò nudum.*

This is one of the extraordinary climbers which, in tropical forests, lay hold of the trunks and limbs of trees, fix themselves upon their bark, root on their surface, often twine round and strangle them in their embrace, or sometimes hang down like cords or cables, from tree to tree, contributing, along with wild Vines, Bauhinias, and other powerful twisting leguminous plants, Aristolochias, Passion-flowers, and the like, to render the forests impassable.

In the organs of vegetation, Philodendron constitutes a case of excessive developement, in part arising out of high

* From φιλεω to love, and δενδρον a tree; in allusion to the habit of the plants of this genus to over-run trees in the South American forests.

heat, light, and moisture; and in part dependent upon its own specific nature. The strong stem that bears its leaves and spathes is the same part which, in the European Arum, remains under ground, in the form of a round leafless tuber. When it is concentrated, as in the latter case, it contains a large quantity of nutritious fæcula, mixed with an acrid principle, while in a diffuse state the fæcula disappears, and the acrid part alone remains. Hence the arborescent Araceous plants are simply dangerous, while the tuberous kinds are both dangerous and nutritious, or, the dangerous parts being removed by washing, simply nutritious.

Caladium, like many of the genera of the Botanists of the last age, was a heterogeneous assemblage of various plants, having only a sort of external, *prima facie*, resemblance; it is now confined to certain tuberous kinds, while the caulescent species go into other genera, of which Philodendron is one.

The species now represented is a native of Brazil, and consequently requires to be cultivated in the stove. For the opportunity of figuring it I am indebted to the Rev. Frederick Beadon of North Stoneham, from whom I received it in December last. Pothos crassinervia is a very different plant.

In the plate—1. is the inside of an anther; 2. its outside; 3. a section shewing the four cells in pairs; 4. is an ovary; and 5. a longitudinal section of it, shewing the position of the ovules, and the form of the stigma.

del. Pub by J. Ridgway 169 Piccadilly May 1 1837.

* MEGACLÍNIUM máximum.

Largest Megaclinium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § MALAXIDEÆ.
MEGACLINIUM. *Suprà, vol.* 12. *fol.* 989.

M. *maximum;* sepalo supremo acuto lateralibus margine involutis acuminatissimis reflexis, labello lineari revoluto.

M. maximum. *Lindl. gen. & sp. Orch. p.* 47; *sine char.*

Facies *herbæ ferè* M. falcati, *sed paulo robustior, et folia minùs emarginata et margine subrevoluta.* Rachis *ensiformi-falcata, dentata, multiflora,* 9 *poll. longa, pallidè viridis.* Flores *herbacei.* Pedicelli *et* calyx *extus sanguineo-maculati.* Sepalum *supremum erectum, oblongum, acutum, denticulatum, utrinque callosum, lateralibus duplò longius;* lateralia *triangularia, e latâ basi acuminatissima, reflexa, marginibus involutis.* Petala *parva, plana, linearia, acuta, pallidè viridia.* Columna *lata, discoidea, tenuis, marginata, basi cum labello lineari fusco revoluto mobili elasticè articulata.* Anthera *unilocularis.* Pollinia 2 *solida, geminata, nec lobata nec lineâ exaratâ.*

Nearly a thousand plates ago, the first species of this most singular genus was published in the present work. At a later period I found the imperfect remains of a second in the Banksian Herbarium, collected by Smeathman in Sierra Leone; and this has at last been added to our gardens by the correspondents of the Messrs. Loddiges, in whose collection the drawing was made in August last.

In general appearance it is a good deal like *M. falcatum,* from which species it differs, in having larger leaves, which are less deeply notched at the point, and more revolute at the edges; in its larger sabre-shaped rachis, which is as much as nine inches long; and in the form of all the parts

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* From μεγας large, and κλίνη a bed, in allusion to the broad, sword-shaped bed or rachis of the flowers.

of the flower. Its lip is hardly so moveable as in *M. falcatum*, in which that part swings up and down with considerable rapidity, like the heads of some Chinese images, when set in motion by a sudden jar.

I believe this will prove one of the easier kinds to cultivate.

Fig. 1. is a highly magnified figure of an entire flower; 2. is a pair of pollen masses.

3

* REHMANNIA chinénsis.

Chinese Rehmannia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARIACEÆ.

REHMANNIA, Libosch. Calyx campanulatus, 5-fidus. *Corolla* ringens, tubuloso-ventricosa: limbo 5-lobo: lobis subæqualibus 2 superioribus reflexis. *Stamina* didynama. *Antheræ* terminales: loculis divergentibus muticis. *Stigma* bilamellatum. *Capsula* ovata, polysperma, unilocularis, bivalvis; valvulis in media parte septiferis, marginibus liberis. *Semina* albuminosa, ovata, membrana spongiosa reticulata involuta. *Fisch. & Meyer Ind. Sem. hort. Petrop. p.* 36. quibusdam mutatis.

R. chinensis, *Fisch. & Meyer. l. c.*
Digitalis glutinosa, *Gærtn. in nov. comment. Acad. Imp. Petrop.* xiv. *p.* 544. *t.* 20.
Gerardia glutinosa, *Bunge enum. pl. chinens. p.* 49.
Rehmannia glutinosa, *Libosch in herb. Imp. Petrop.*

Herba *perennis, glutinosa, pilosa, palmaris ad bipedalem, omni parte livido-purpurascens.* Folia *obovata, inæqualiter grossè dentata, alterna, sursùm decrescentia.* Racemus *laxus, in plantâ cultâ 8-10-florus, basi foliosus, in spontaneâ contractus.* Flores *inferiores in axillis bractearum foliacearum longè pedunculati, superiores subsessiles.* Calyx *villosissimus, campanulatus, quinquedentatus, limbo paulò obliquo.* Corolla *tubulosa, villosa, sesquiuncialis*; tubo *extùs fusco-purpureo ventre lutescente*; limbo *ferrugineo, venoso, basi sanguineo, 5-lobo; laciniis rotundatis, superioribus latioribus paulò reflexis, inferiore lineari cæteris multo angustiore utrinque plicatâ.* Stamina 4, *didynama, versus basin tubi inserta, inclusa, glabra, antherarum lobis subparallelis muticis.* Ovarium *ovatum, uniloculare, placentis duabus didymis reflexis polyspermis*; stylus *filiformis*; stigma *bilamellatum, lobis æqualibus.*

This plant was sent from the Imperial Garden at St. Petersburgh to that of the Horticultural Society in the year 1835; and the reported size of the flowers excited great

* An unexplained name.

expectations as to its beauty. It will, however, be seen by our figure, that the dinginess of their colour so much diminishes the effect of the magnitude, that the plant is by no means distinguished for its ornamental appearance. It flowers in July, and although nearly hardy, succeeds best in a cool green-house, where it is readily multiplied by cuttings.

It is a native of the North of China and Chinese Mongolia ; and is nearly related to the genus Digitalis. In the *Natural System of Botany* it was referred to Cyrtandraceæ, on account of its one-celled ovary with double placentæ, but upon the whole it is better placed in Scrophulariaceæ.

Fig. 1. is a corolla split open to shew the stamens; the upper segment is the lip ; 2. is the ovary, style, and stigma ; 3. is a section of the ovary.

Pub. by J. Ridgway 169 Piccadilly June 1. 1837. J. Watts sc.

* EPIDENDRUM noctúrnum; β. latifólium.

Broad-leaved Night-smelling Epidendrum.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § EPIDENDREÆ.
EPIDENDRUM, Suprà vol. 1. *fol.* 17.

E. *nocturnum;* foliis distichis oblongis acutis, floribus subgeminis terminalibus, sepalis petalisque linearibus acuminatis patentibus, labelli lobis lateralibus ovatis integerrimis intermedio setaceo brevioribus. *Lindl. Gen. & Sp. Orch.* 105. cum synonymis.

β. *latifolium;* foliis oblongis obtusis subemarginatis, labelli lobo medio lineari-lanceolato, floribus duplò majoribus.

The original Epidendrum nocturnum was found by Jacquin, filling the mountainous woods of Martinique with its fragrance at night, and is now common in our hot-houses. The plant now figured, for which I am indebted to His Grace the Duke of Devonshire, differs from it in several respects, especially in its much greater size, broader leaves which are of an oblong figure, and larger flowers. Mr. Paxton is, however, certainly right in considering it a mere variety of the species, under which it is here arranged.

I received it from Chatsworth in Sept. 1836.

* See folio 1415.

[illegible] by J. Ridgway 169 Piccadilly June [illegible]

* EUCHARÍDIUM concínnum.

Neat Eucharidium.

TETRANDRIA *MONOGYNIA.*

Nat. ord. ONAGRACEÆ.

EUCHARIDIUM. *Calycis* tubus supra ovarium elongatus, filiformis, cum limbo 4-partito deciduus. *Petala* 4, unguiculata, trifida. *Stamina* 4! *Stigma* bilobum. *Capsula* 4-locularis, 4-valvis, dehiscens. *Semina* numerosa, in quovis loculo uniserialia, sursùm imbricata, erecta, alato-marginata. *Fischer & Meyer index secund. hort. Petrop.* 36.

E. concinnum, *Fischer & Meyer l. c.*

Herba *annua, ascendens, undique minutissimè pubescens.* Folia *petiolata, ovata, integerrima.* Flores *axillares, solitarii, foliis subæquales.* Calycis *tubus filiformis, deciduus; limbus quadripartitus, laciniis angustis acutis liberis aut cohærentibus.* Petala 4, *triloba, purpureo-rosea, lineis tribus albis maculisque duabus atropurpureis.* Stamina 4, *sepalis opposita, fauce tubi inserta; antheris pilosis.* Discus *brevis, cylindraceus, basin styli circumdans.* Ovarium *lineare,* 4-*loculare; ovulis indefinitis uniseriatis.* Stylus *filiformis, glaber.* Stigma *villosum,* 4-*lobum; lobis duobus oppositis nanis.* Capsula *linearis, quadrivalvis, papyracea, columella filiformi centrali, liberâ.* Semina *oblonga, subfusiformia, fusca, acupunctata, hinc plana, membranaceo-marginata, demum involuta.*

A little annual plant allied to Clarkia, found near the Russian colony of Ross in New California, and communicated to the Garden of the Horticultural Society from that of the Emperor at St. Petersburgh in 1836.

It flowers in about six weeks from the time of germination, and although not to be compared with Clarkia pulchella in point of beauty, is a neat and by no means weedy plant, and perfectly hardy.

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* From ευχαρις in the sense of agreeable; in allusion to the appearance of this plant.

Fig. 1. is the tube of the calyx split open, with the four stamens placed at the base of the remains of the sepals which have been cut off; fig. 2. represents the disk, style, and stigma; fig. 3. is a section of the ovary.

Drake. del.   J. Watts sc.

Pub by J. Ridgway 169 Piccadilly June 1. 1837.

* DELPHÍNIUM intermédium.

Variable Larkspur.

POLYANDRIA *TRIGYNIA.*

Nat. ord. RANUNCULACEÆ.
DELPHINIUM. *Suprà, vol.* 14. *fol.* 1192.

D. *intermedium;* petiolis basi non dilatatis, foliis 5-7-fidis superioribus trilobis omnium lobis inciso-serratis, racemis glaucis, pedicellis bracteolis calycibus ovariisque glabris.

D. intermedium, *Ait. Hort. Kew. ed.* 1. *v.* 2. 243. *Willd. Sp. pl.* 2. 1228. *DeCand. Prodr.* 1. 55.

Perennial roots; a tall branching stem, glaucous at the upper part, and either downy or smooth towards the ground; leaves having a palmated figure, with from three to seven deep incised lobes, and either hairy or perfectly smooth, their petiole being round; smooth, glaucous, branched or simple racemes of flowers of a blue colour, which is either deep or so pale as to be almost white; and a total absence of hairs from all the parts connected with the flowers, except the disk of the two-lobed petals—these characters include a variety of plants found in mountainous vallies, from the Pyrenees to Kamtchatka, assuming an endless diversity of appearance in their leaves and flowers, designated by Botanists under various names, but all belonging to one and the same species. The *D. alpinum* of Waldstein and Kitaibel from Hungary, *D. elatum* of many authors, *D. palmatifidum* of DeCandolle at least in part, and probably some others, are all undoubtedly referable, as simple varieties, to *D. intermedium* of Aiton, the plant now represented. Botanic

* See folio 1503.

Gardens swarm with specific names all belonging to little varieties, which those who judge of the Vegetable Kingdom by its appearance in the masquerade warehouse of a gardener, or who are not aware that a difference and a distinction must not be confounded, actually believe to be so many natural species. To illustrate such variations by separate plates, would be a sad waste of time and paper, I shall therefore only figure hereafter such, belonging to this species, as are really striking enough to render a mistake about them probable.

As to *D. palmatifidum* and *D. intermedium* of DeCandolle, to the former of which the plant now figured belongs, it does not appear from our learned and excellent friend's own shewing, that they differ in anything more than that the leaves of the first are called truncate at the base, and of the second cordate. But it is in vain that we seek for permanent differences between these two forms, and even DeCandolle himself refers under his var. *α.* of *D. palmatifidum*, to the 79th figure in the fourth vol. of Gmelin's Flora Sibirica, which agrees entirely with the character of *D. intermedium.*

One of the commonest of all perennials in Botanic Gardens, where it grows six or seven feet high in rich soil, and forms a beautiful object if allowed to spring among bushes which partially support the branches, and prevent their being broken by wind.

1964.

by J. Ridgway 169 Piccadilly June

* BOLBOPHÝLLUM cocoínum.

The Cocoa-nut Bolbophyllum.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § MALAXIDEÆ.
BOLBOPHYLLUM. Suprà, vol. 23. *fol.* 1942.

B. *cocoinum ;* pseudobulbis ovatis tetragonis, foliis solitariis lanceolatis spicâ strictâ multiflorâ brevioribus, bracteis membranaceis linearibus acutis ovario longioribus, sepalis aristatis, petalis linearibus denticulatis columnâ bicorni longioribus, labello ovato-lanceolato obtuso basi ciliato sub apice foveato.
B. *cocoinum. Bateman in litt.*

A pretty little species of this extensive genus, imported by Messrs. Loddiges from Sierra Leone.

It is related to Bolb. recurvum, tetragonum, and the others in their neighbourhood, but is readily known by the pale flesh-coloured flowers, the serrated petals, and the concave short lip, delicately ciliated towards its base.

It flowered at Hackney, in January 1835, filling the house with the scent of a cocoa-nut, and I received it about the same time from Mr. Bateman.

In the dissections fig. 1. is a front view of a column with its two horns arising from either margin, and the serrated petals ; fig. 2. is the upper side of the lip ; fig. 3. represents the pollen-masses.

* See folio 1942.

1965.

Miss Drake del.

Pub by J. Ridgway 169 Piccadilly June 1. 1837.

J. Watts sc.

THE PURPLE LABURNUM.

DIADELPHIA *DE-CANDRIA.*

Nat. ord. Fabaceæ, or Leguminosæ.
CYTISUS. Suprà, fol. 1191.

Garden Variety.

The Laburnum is so very beautiful a tree, that when, some years since, there was sent from France what was called a *scarlet* Laburnum, Cytisus Laburnum *coccineum*, or the *purple* Laburnum, every body was anxious to obtain a plant with so promising a name. It was in vain that persons who knew something of the tricks of foreign dealers, cautioned their friends against allowing their expectations to become too sanguine. The plants had a ready sale, and every body was eager to be the first to obtain a sight of the flowers. It is needless to describe the disappointment that was felt, when the scarlet Laburnum first produced such dull, dingy, dirty-purple clusters, as those in the accompanying plate. And yet what else could have been anticipated? For it was well known that the origin of the variety was between C. purpureus and C. Laburnum. Surely nothing better ought to have been expected from an intermixture so monstrous in regard to the habit of the two parents, and so unpromising as to their colours. Purple and yellow do not form scarlet when they are mixed, but just such a tint as that which the purple Laburnum actually possesses.

The plant is figured here merely for the sake of dispelling the false impression that still exists as to its appearance. It is not at all worth cultivation.

Pub. by J. Ridgway 169 Piccadilly June 1. 1837.

* WIGÁNDIA caracasána.

Caraccas Wigandia.

PENTANDRIA *DIGYNIA.*

Nat. ord. Hydroleaceæ.

WIGANDIA. *Calyx* 5-partitus, persistens. *Corolla* infundibularis, limbo 5-partito patente. *Stamina* 5, exserta. *Antheræ* sagittatæ. *Styli* 2. *Stigmata* subpeltato-depressa. *Capsula* ovato-oblonga, bilocularis, (unilocularis *m.*) loculicido-bivalvis. *Placentæ* 4, binæ in quolibet loculo laminæformes (2, bilobæ, reflexæ, polyspermæ *m.*). *Humb. et Bonpl. n. g. et sp. pl. vol.* 2. *Römer & Schultes*, 6. xviii.

W. *caracasana;* foliis ellipticis acutis duplicato-dentatis (utrinque) hirto-tomentosis supra canescentibus subtùs incanis et mollissimis, spicis paniculatis. *Humb. Bonpl. & Kunth. nov. gen. et sp. pl.* 3. 128. *Römer & Schultes. Sp. Pl.* 6. 190.

Planta *culta in caldario orgyalis, a spontanea, quam coràm habeo, diversa est foliis viridioribus contextu laxiore et aliquando costâ venisque primariis hispidis, necnon floribus triplò majoribus.* Ovarium *certissimè uniloculare est placentis bilobis revolutis, nec biloculare.*

A native of the Caraccas, where it was originally found at the Quebrada of Cotecita, at the height of 2880 feet above the level of the sea, by Messrs. Humboldt and Bonpland. To this country it was introduced from the Royal Garden at Berlin, whence it was sent to His Grace the Duke of Northumberland, to whom I am obliged for the specimen now figured.

It is a tender stove shrub, about six feet high, flowering at uncertain periods.

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* So named by Kunth in compliment to John Wigand, a bishop of Pomerania, and author of *Veræ historiæ de succino prussico, et de herbis in Borussia nascentibus.* Jena, 1590.

There are now before me wild specimens from the Caraccas, in which the leaves are more hoary, without any hispidity, and the flowers not more than half the size of the cultivated plant, but no further differences are perceptible.

If well grown, and formed into a bush, feathered to the surface of the ground, this plant must have a very beautiful appearance with its large clusters of delicate lilac flowers, which continue to open in succession for a long time. But if formed into a sort of stake with a few leaves and flowers at the top, as is too frequently the case with stove plants, it will be found to possess little claims to attractiveness.

W. B. Booth. del. Pub by J. Ridgway 169. Piccadilly June 1. 1837. S. Watts sc.

* HABRÁNTHUS gracilifolius; β. Boothianus.

Mr. Booth's Slender-leaved Habranthus.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDACEÆ.
HABRÀNTHUS. *Suprà, vol.* 16. *fol.* 1345.

H. *gracilifolius, β. Boothianus;* spathâ pedunculo et germine erubescentibus, germine et pedunculo magis elongatis, filamentorum quaternâ discrepantiâ obsoletiore, stigmate majore. *Herbert Amaryllid. p.* 165.

I some time since received a drawing of this plant from Sir Charles Lemon, with the following memoranda from Mr. Booth, the gardener at Carclew.

"Bulbs of this pretty little species of Habranthus were, last year, presented to Sir Charles Lemon, Bart. M.P., by Capt. Thomas Ball Sulivan, C.B., to whom they had been forwarded from Maldonado, where they were collected by Lieut. James Sulivan, R.N., of H. M. ship Beagle, now engaged in the extensive survey of that part of the South American coast."

"*Bulb* about the size of a pigeon's egg, and of a dark brown colour. *Leaves* not produced until after the flowers decay; linear, narrow, and twisted; of a glaucous green, with a deep groove running from the base to the point, which is round and blunt. *Scape* erect, 7 inches high, round and smooth, purplish at the base, from which it upwards assumes a pale glaucous green. *Flowers* solitary, nodding, on a round, and somewhat bent, purplish-coloured peduncle, about two inches long at the time the flower opens, increasing to three inches long, and becoming pale green. *Spatha* tubular below, bifid upwards, 1½ inch long, and of a pale

* See folio 1345.

brown colour, tipped with green. *Perianth* campanulate, an inch and a half in length, and expanding to about the same width; of a bright pink on both sides, with darker coloured veins. The *tube* is shallow and of a pale shining green, with the throat almost filled by the fleshy membrane at the base of the petal, to which the filaments are attached. *Segments* ovate-acuminate, each about half an inch broad, nearly equal, and striated with green at the base. The three outer divisions overlap the three inner ones, the former of which have each a small greenish tip. *Stamens* declinate, three long and three short; the longest being rather more than half the length of the perianth. *Anthers* very large, deep yellow, versatile. *Ovary* oblong, three-sided, thickest towards the base of the flower, three-celled with numerous seeds in each cell. *Ovules* apparently flat, laid over one another, and attached to the placenta opposite the angular part of the ovary; the three dissepiments being alternate with the three angles. *Style* filiform, the same colour as the segments and exceeding half their length. *Stigma* 3-lobed, each lobe being one-fourth of an inch long, clavate, round, and recurved.

"From the little knowledge we have of this plant, we are inclined to consider it as half hardy, requiring only protection from frost. The soil around the bulbs, when received, was of a very sandy nature. We have, therefore, grown it in a similar mixture of loam, peat, and sand, in which it seems to thrive pretty well, although we have not been able to increase it. Its flowering season is October. The flowers remain in perfection for eight or ten days.

"*Fig.* 1. represents the scape three days before the flower expanded. 2. The flower when open. 3. The same when shut, or when the sun is not shining upon it. 4. An ovary with the base of the perianth. 5. A section of the same."

Mr. Booth considered it a distinct species, but Mr. Herbert has referred it without any doubt to his H. *gracilifolius* as a variety.

Pub by J. Ridgway 169 Piccadilly July. 1. 1837.

S. Watts. sc.

* PLEUROTHALLIS saurocéphala.

Lizard-headed Pleurothallis.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § MALAXIDEÆ.
PLEUROTHALLIS, *Suprà vol.* 9. *fol.* 759.

P. *saurocephala;* folio coriaceo oblongo cauli vaginato subæquali racemis breviore, bracteis ovatis ovario brevioribus, sepalis coriaceis oblongis pubescentibus lateralibus semi-connatis, petalis nanis acutis, labello oblongo medio excavato utrinque bilamellato: lamellis marginantibus incurvis.
P. saurocephala, *Lodd. Bot. Cab.*

The accompanying drawing was sent me, with the following description, by Mr. W. B. Booth from the Garden of Sir Charles Lemon, Bart. M.P. of Carclew. The plant has been some years in the gardens near London, but has always remained a scarce species.

"The species now before us was, with some other tropical plants, added to the collection of Sir Charles Lemon, by Mrs. Lake of Falmouth, and flowered for the first time in September last.

"*Stem* jointed, round, smooth and upright, from six to eight inches high, and nearly covered by the sheathing permanent bracteæ which proceed from the joints. *Leaves* ovate-oblong, obtuse, very thick and fleshy, about five inches in length and two in breadth, of a deep green on both sides, nearly flat, excepting at the base, which is slightly compressed or cupped. The *flower spikes* spring from a kind of spathe in the axil, formed by the leaf and stem; whether

* See folio 1298.

they always come in pairs we are unable to say with certainty, our specimen had only two, but on other parts of the same plant we found the remains of five, and even as many as eight of these spikes. They are each from four to six inches long, with numerous cucullate, roundish acuminate bracteæ, so closely imbricated at first as almost to conceal the flowers, which are small and produced on round, pale green, short foot-stalks. *Sepals* fleshy, conniving, the upper one arched, and rising nearly erect, three veined on the outside, which is of a dull green. The inside is a yellowish green, beautifully marked with small dark brown spots. The two lower sepals are partly connected together, and of a much darker colour and more glossy than the upper. *Petals* small, embracing the column, or closely joined to it; somewhat cordate and pointed, of a dull green with their edges tinged with brown. *Labellum* entire, rounded at the point and slightly undulated at the margin, which is also tinged like the petals. *Column* round, somewhat bent and club-shaped, largest towards the point."

1969.

Pub by J. Ridgway 169 Piccadilly July 1. 1837. S. Watts sc.

* DELPHÍNIUM intermédium; *var.* pallidum.

Pale-blue variable Larkspur.

POLYANDRIA *TRIGYNIA.*

Nat. ord. Ranunculaceæ.
DELPHINIUM. Suprà, vol. 14. *fol.* 1192.

D. intermedium, *Suprà, fol.* 1963.
Var. *pallidum;* undique glaberrimum glaucescens, floribus pallidè cœruleis densè racemosis, petalorum lateralium lobis rotundatis.

This is a lovely variety of the Delphinium intermedium figured in the last number of the present work. It grows seven feet high in rich ground, with a firm stem of a delicate glaucous green, its leaves are thin and destitute of the smallest trace of hairiness, while its long branched racemes of nodding sky-blue flowers give a most graceful appearance to the terminations of the branches.

It differs from the common form of the species in the perfect nakedness even of the leaves, and in the lobes of the small hairy lateral petals being more rounded and perhaps shorter than usual.

The drawing was made in the garden of the Horticultural Society in July, 1836.

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* See folio 1503.

del. Pub by J Ridgway 169 Piccadilly Aug 1. 1837. J. Watts. sc.

* BOLBOPHÝLLUM saltatórium.

Dancing Bolbophyllum.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § MALAXIDEÆ.
BOLBOPHYLLUM. *Suprà, vol.* 23. *fol.* 1942.

B. *saltatorium;* pseudobulbis ovatis compressis ancipitibus, foliis solitariis acutis racemis brevioribus, bracteis ovatis membranaceis appressis emarcidis ovario subæqualibus, sepalis ovato-oblongis pubescentibus subæqualibus, sepalis subulatis columnâ longioribus, labello ovato acuminato sepalis longiore villoso apice stuposo.

This is the plant alluded to at folio 1942 as resembling Bolbophyllum barbigerum. Like that species it was imported from Sierra Leone by Messrs. Loddiges, in whose collection the drawing was made in December last.

Fig. 1. is a magnified view of the whole flower; 2. the column and petals; 3. the base of the lip; and 4. the pollen masses.

It is worthy of remark, that in all this genus Bolbophyllum the spiral vessels are particularly tough and numerous. I have noticed this circumstance in the calyx of the plant now figured, and Mr. Griffith has observed it in the sheaths of the leaves of Bolbophyllum auricomum in Burma.

* See folio 1942.

I take this opportunity of defining a new genus of Mexican Orchidaceæ received by the Horticultural Society from the neighbourhood of Vera Cruz, where it was found by Mr. Theodore Hartweg, after whom, as the original Hartwegia proves to be nothing but Chlorophytum, I have named it.

HARTWEGIA *(Orchidaceæ § Epidendreæ).*

Perianthium patulum, coloratum; sepalis lateralibus basi productis labello adnatis. *Labellum* cum columna connatum, basi gibbosum, limbo ovato basi calloso. *Anthera* 4-locularis. *Pollinia* 4, olivaceo-purpurea, filis replicatis. ——Caulis *monophyllus.* Pedunculus *longissimus, capillaris, arctè vaginatus, apice floridus.*

H. *purpurea.* Folium solitarium, coriaceum, ovato-lanceolatum lentiginosum, cauli tereti æquale, pedunculo capillari multotiès brevius. Flores parvi, purpurei. Sepala acuta petalis paulò majora. Labelli limbus basi albus callosus.

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* PSORÁLEA orbiculàris.

Round-leaved Psoralea.

DIADELPHIA *DECANDRIA.*

Nat. ord. FABACEÆ OF LEGUMINOSÆ, § PAPILIONACEÆ.
PSORALEA. *Suprà, vol.* 12. *fol.* 968.

P. *orbicularis;* undique pubescens glandulis clavatis truncatis intermixtis, foliis trifoliolatis longi-pedunculatis, foliolis subrotundo-ovalibus, capitulis conicis, pedunculis longissimis axillaribus, bracteis oblongis concavis calycibusque hirsutissimis, caule repenti.

A hardy herbaceous plant, with long tough slender creeping stems from which the leaves spring upon stalks about six inches long.

It is remarkable for the numerous dark glands which are mingled with soft hairs all over its surface, and which resemble the kind of nails which upholsterers call tacks.

A native of California, whence seeds were sent to the Horticultural Society by Mr. Douglas. It flowers in June and July.

Fig. 1. is a magnified calyx from which the petals have been removed; the glands are seen scattered over its surface, and from between the stamens projects the small hairy capitate stigma. Fig. 2. represents the ovary, opened to exhibit the single ovule, and having the style smooth, but thickened upwards, and a ring of hairs surrounding the stigma. Fig. 3. is a capitate gland very much magnified; Fig. 4. is a ripe pod surrounded by the calyx, and 5. is one of the ripe olive-green seeds.

* See folio 1769.

1912.

* EULÓPHIA macrostáchya.

Long-spiked Eulophia.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.
EULOPHIA, Suprà vol. 7. fol. 686.

E. *macrostachya;* foliis oblongis utrinque acuminatis plicatis subtricostatis, scapo simplici radicali (laterali) foliis longiore, sepalis lineari-lanceolatis acuminatis, petalis conformibus latioribus undulatis, labelli suborbicularis trilobi lobis lateralibus intermedio altè bilobo abbreviato subæqualibus: lamellis duabus nanis ad basin, calcare subrotundo inflato obtuso. *Gen. et sp. Orch. p.* 183.

A handsome species of this extensive genus, inhabiting shady woods in Ceylon, whence it was sent to the Horticultural Society some years ago, by Mr. Watson, the Superintendent of the Botanic Garden at Peradenia.

It is one of the easiest of Orchidaceous plants to cultivate, and produces its graceful racemes of green and yellow flowers abundantly towards the latter part of the year. They go on growing and producing fresh flowers till Christmas.

The stems are in the form of long irregular erect cones, and when old are covered by the withered or ragged remains of the leaves; they are analogous to the pseudo-bulbs of other Orchidaceæ, and to those horizontal tuberous rhizomata which in some species of this genus yield a kind of Salep.

Fig. 1. is a section of the lip showing one of the scales that stand at the base of its limb.

* See folio 1433.

Pub by J. Ridgway 169 Piccadilly July. 1. 18

1973

* POTENTILLA glandulósa; β. incisa.

Cut-leaved Glandular Potentilla.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ, § Potentilleæ.
POTENTILLA. *Suprà, vol.* 15. *fol.* 1359.

P. glandulosa, *Suprà, vol.* 19. *fol.* 1583.
β. *incisa ;* foliolis incisis utrinque acutis, petalis calyce longioribus.

A hardy herbaceous plant introduced from California by the Horticultural Society, in whose garden it flowered in June 1836.

It is not a horticultural plant, being too weedy to offer any reasonable probability of being improved by culture, but it is interesting to Botanists as an evidence of the extent to which species vary permanently in their wild state. That it is a mere variety of Potentilla glandulosa, figured at plate 1583 of this work, I cannot doubt, and yet the wild specimens have the petals longer than the calyx, the stem weaker and less glandular, and the leaflets not only deeply cut as well as serrated but strikingly cuneate at the base, and pointed at the other end, instead of having a roundish oblong figure. These distinctions, which are sufficiently obvious when the plant is wild, become so much more striking in cultivated individuals that a Botanist, unacquainted with the wild plant, might be well excused for supposing it to be a distinct species.

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* See folio 1379.

by J. Ridgway 169 Piccadilly

* SPARTIUM acutifòlium.

Sharp-leaved Spanish Broom.

DIADELPHIA *DECANDRIA.*

Nat. ord. FABACEÆ or LEGUMINOSÆ, § PAPILIONACEÆ.

SPARTIUM, Linn. *Calyx* membranaceus, spathaceus, supernè fissus apice quinquedentatus subbilabiatus. *Corollæ* vexillum subrotundum, complicatum, carinâ acuminatâ et petalis parum agglutinatis bipartibili. *Stamina* monadelpha. *Legumen* plano-compressum, polyspermum, eglandulosum.——Frutex *glaber*, ramis *virgatis*, *teretibus*, foliis *paucis lanceolatis*, floribus *in racemos terminales dispositis distantibus flavis.* DC. prodr. 2. 145.

S. *acutifolium;* foliis acuminatis, racemis laxioribus.

Whether this is more than a variety of Spanish Broom I cannot say. It appears to be a distinct species; for its leaves are not only longer and taper-pointed (fig. 1.), instead of being rounded at the point (fig. 2.), but the racemes are more lax, and the manner of growth far more graceful. Otherwise it is like the Spanish Broom. It was raised in the Garden of the Horticultural Society from Turkish seeds, and proves a hardy shrub, with fragrant yellow flowers.

* Spartium junceum appears to have been the σπαρτιον of Dioscorides, and the σπαρτον of Aristotle, of which bees were fond; it is a very different plant from the λινοσπαρτον of Theophrastus, which certainly was either Lygeum Spartum, or Stipa tenacissima.

Pub by J. Ridgway 169 Piccadilly July 1. 1837. S. Watts sc

AZALEA Seymouri.

Garden Variety.

Rhododendron Seymouri.
MATER ; Rhododendron Rhodora *(Rhodora Canadensis).*
PATER; Rhododendron luteum *(Azalea Pontica).* } *Herbert MSS.*

"A great number of plants were raised some years ago at Spofforth from Rhodora Canadensis, impregnated with the pollen of Azalea Pontica. Their constitution seemed ticklish, or the peat in which they were grown disagreed with them, and only one plant was preserved, which formed a healthy low bush, more spreading than Rhodora. Its leaves are produced early in the spring, and last year they were very much damaged by a severe frost in April. It pushed afresh afterwards vigorously, and formed two flowering buds. On the approach of spring, to avoid any danger of damage to the blossom by frost, the plant was potted, and placed in an airy greenhouse. The leaves pushed long before the flower buds began to move and completely clothed the plant before their expansion, contrary to the habit of Rhodora. The flowers expanded at the latter end of March, of the palest yellow, the number of stamens being irregular, seven, or nine in the first that opened. I have at this moment before me an umbel of a genuine Azalea Pontica, of which two flowers have seven, and two six, stamens; shewing clearly that the deficiency of the five stamens of inferior power in the Azaleas is not a generic distinction, but an imperfection. It is observable that crosses between the genuine and the Azaleaform sections of Rhododendron generally have seven or nine stamens, like the Indian Azalea, which forms an intermediate section both as to leaf and flower. Some cross-bred plants, between Rhododendron Ponticum and Azalea Pontica, raised from seed obtained the same season at Spofforth, hav-

ing flowered last year at Highclere, varying in colour so as to include bright yellow, lemon, and chesnut colour, it is probable that a like diversity would have appeared in the cross, if more of the seedlings had been preserved.

"The other umbel of the mule from Rhodora has become almost white, the yellow fading, but shews a little tinge of purple. I observe that its calyx is less obsolete than that of Az. Pontica, and its limb shorter in proportion to the tube and the segments narrower."—*Herbert MSS.*

1976.

del. Pub. by J. Ridgway 169 Piccadilly Aug. 1. 1837. S. Watts sc.

* CYMBIDIUM ensifólium; *var.* estriátum.

Sword-leaved Cymbidium; streakless variety.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.
CYMBIDIUM. *Suprà, vol.* 7. *fol.* 529.

C. *ensifolium;* foliis lineari-ensiformibus striatis acutis scapis erectis multifloris, bracteis ovario multò brevioribus, sepalis petalisque lineari-oblongis acutis, labello indiviso planiusculo oblongo undulato revoluto obtuso medio sulcato, sulco pone apicem bidentato.

Epidendrum ensifolium. *Linn. sp. plant.* 1352. "*Smith. spicileg. botanic.* 22. *t.* 24."

Limodorum ensatum. *Thunb. fl. jap.* 29. *Banks. ic. Kæmpf. t.* 3.

C. ensifolium. *Swartz. nov. act. ups.* 6. 77. *Gen. et sp. Orch.* 162.

α. *striatum;* sepalis petalisque concoloribus purpureo-lineatis. *Bot. mag. t.* 1751.

β. *estriatum;* sepalis virescentibus petalisque albidis obsoletè striatìm sanguineo punctatis, lineis nullis.

The variety of this plant originally introduced from China, we have not seen for some years; it had flowers distinctly lined with purple, as in the figure in the Botanical Magazine. That which is now more generally cultivated is what is here represented with greener sepals, and pale whitish petals, both without lines; and seems intermediate between the first and the spotless *Cymbidium xiphiifolium.*

It is a very easy plant to cultivate, requiring nothing more than good greenhouse management, when it produces quantities of its slightly fragrant flowers in the spring. The

* See folio 1530.

drawing was made in the garden of the Horticultural Society in May last.

C. *xiphiifolium* with spotless pallid flowers is very near this species, and is perhaps a variety; but it appears to be distinguished by its lower bracts being nearly as long as the ovary, and by the ovate flat labellum, in which no undulation exists.

Fig. 1. is the labellum of C. ensifolium β; fig. 2. of C. xiphiifolium.

Messrs. Loddiges and Mr. Barker of Springfield have lately flowered a most beautiful new Brazilian Orchidaceous plant, which will soon be published in this work. It will be called *Miltonia spectabilis*, the character of the genus being very briefly the following:—

Perianthium explanatum, conforme. *Labellum* indivisum dilatatum cum ovario continuum basi cuniculatum. *Columna* et *pollinia* Oncidii.

Sp. 1. *M. spectabilis*. Pseudobulbosa. Vaginæ scapi uniflori equitantes. Sepala et petala pallide viridicitrina. Labellum grande violaceum.

Miss Drake del. Pub by J. Ridgway 169. Piccadilly Aug. 1. 1837. J. Watts sc.

* HOSÁCKIA stolonífera.

Creeping-rooted Hosackia.

DIADELPHIA *DECANDRIA.*

Nat. ord. FABACEÆ or LEGUMINOSÆ, § PAPILIONACEÆ.
HOSACKIA. Suprà, vol. 15. *fol.* 1257.

H. *stolonifera;* stipulis ovatis herbaceis, foliis septemjugis: foliolis ovatis oblongisve mucronulatis, umbellis multifloris capitatis, pedunculis infra umbellam folio simplici vel trifoliolato bracteatis, calycinis dentibus brevissimis.

A stoloniferous, hardy, herbaceous plant. *Stems* about 3 feet high, taper, smooth. *Leaves* pinnate with an odd one; the leaflets in about seven pairs, opposite or alternate, ovate or oval, mucronulate, when young finely downy, when full grown naked; *stipules* herbaceous, ovate, acute. *Peduncles* axillary, erect, shorter than the leaves, with a simple or 3-foliate bract below the umbel. *Umbels* capitate, many-flowered, nodding. *Calyx* tubular, smooth, shortly 5-toothed, contracted at the base, slightly downy at the edge. *Petals* greenish, with chocolate-coloured middles; their stalks distinctly longer than the calyx: that of the vexillum standing apart from the others. *Stamens* nearly equal; the tenth almost adherent to the others. *Ovary* linear, many-seeded, smooth. *Style* smooth; *stigma* capitate. *Legumes* in nodding umbels, about two inches long, taper, smooth, mucronate; with a succulent lining which separates the seeds from each other before ripeness, drying up afterwards. *Seeds* oblong, brownish; mottled with a darker colour. *Embryo* sometimes with THREE COTYLEDONS.

* See folio 1257.

Among the last seeds sent from California by Mr. Douglas, were some of this plant, which forms an interesting addition to the genus Hosackia. It is much larger than any other known species, forming a stout bush about three feet high, and multiplying itself readily by its creeping roots. Although its flowers are unattractive, it forms a good shrubbery plant, where it is desirable to form the appearance of undergrowth quickly—for it resembles a shrub during the summer, and it spreads so fast as soon to extend far beyond its original station. It flowers in June, and produces an abundance of its seeds in August.

It is nearly allied to *H. crassifolia*, which is distinguished by its scarious stipules, 4- or 5-paired leaves, with more obtuse leaflets, and few-flowered umbels.

I remarked among the seeds I examined, two whose embryos had three cotyledons, an unusual occurrence, the more interesting as taking place in the embryo of a species whose leaves are unequally pinnated, and indicating a kind of foreshadowing in the rudimentary plant of the plan of organization in the perfect plant.

[illegible] del. Pub by J. Ridgway 169 Piccadilly Aug 1 1837. [illegible]

* ORNITHOGALUM latifólium.

Broad-leaved Ornithogalum.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ.

ORNITHOGALUM. *Suprà, vol.* 8. *fol.* 158.

O. *latifolium;* racemo longissimo conico, filamentis subulatis, pedunculis inferioribus patentissimis flore multotiès longioribus, foliis latè ligulatis sublanceolatis.

O. latifolium. *Linn. sp. pl.* 440. *Römer & Schultes. Syst. Veg.* 7. 514. *Bot. Mag. t.* 876. " *Jacq. coll.* 2. 318. *ic. rar. t.* 424."

O. maximum. *Clus. hist. append.* 257.

" Stellaris latifolia. *Mœnch.*"

This plant, not now uncommon in gardens, does not appear to have had its native country ascertained. Linnæus says Egypt and Arabia, probably upon the statement of Clusius that he received it out of Italy, under the name of Ornithogalum arabicum, Lilium alexandrinum, and Byzantinum. Mr. Ker adds Hungary according to some persons. But no notice is taken of it by Forskahl; it does not occur among the herbaria of Traill or Bové from Egypt, of Fischer from Arabia, or of Colonel Chesney from Mesopotamia; Reichenbach takes no notice of it in his very extensive Flora excursoria, nor can I find any authentic trace of it elsewhere. The only Egyptian Ornithogalum I have met with appears to be O. umbellatum. *O. garganicum*, found by Tenore in the kingdom of Naples, seems the nearest approach to it; and

* See folio 1853.

can it be a garden state of that species? for it seems to be known only in gardens.

Mr. Strangways, to whom I am obliged for an opportunity of figuring the plant, rightly observes that this is erroneously called by gardeners *O. pyramidale*, which is a name applied by Jacquin to *O. Narbonense*, which is near our wild *O. pyrenaicum*. He adds, that when fully blown the petals of this species are quite white on both sides, never having the decided green line found in most Ornithogalums.

A hardy species, flowering in April and May.

Drake del.

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S. Watts sc.

1979

* LUPÍNUS versicolor.

Party-coloured Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. Fabaceæ or Leguminosæ, § Papilionaceæ.
LUPINUS. *Suprà, vol.* 13. *fol.* 1096.

II. Perennes; valvis leguminum maturitate dissilientibus et spiraliter sese contorquentibus.

† *Caule annuo vel persistente, leguminibus polyspermis, seminibus subovatis: foveolâ hili ovali, ferè totam apicem angustiorem seminis occupante, cotyledonibus germinatione erectis petiolatis, foliis primordialibus non ante germinationem conspicuis alternis.*

G. Tribus L. Nootkatensis

* *Caulibus subdecumbentibus laxis foliosis diutiùs persistentibus, stipulis plerumque permagnis, racemis crassis densifloris, floribus magnis, calycibus vel bracteolatis: labiis plùs minùs divisis, vel ebracteolatis demumque basi circumscissis et cum corolla deciduis.* J. G. Agardh synops. lupin. p. 19.

L. *versicolor;* caule basi lignoso decumbente sericeo, foliolis 9 obovato-linearibus sericeis margine incanis petiolo brevioribus, stipulis setaceis pilosis, calycibus verticillatis subbracteolatis: labio superiore emarginato, carinâ ciliatâ, leguminibus villosis.

Root perennial, woody. *Stems* decumbent, silky, rather woody at the base, about two feet high, much branched, rather hoary towards the upper end. *Leaflets* 9, narrow-obovate, silky, hoary at the margin, shorter than the petiole, which is also silky. *Stipules* green, subulate, three times as short as the leaflets, with long weak hairs. *Racemes* terminal, verticillate, many-flowered. *Flowers* variable in colour, between rose-colour, violet, pale blue, greenish white

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* See folio 1198.

and pink on the same raceme, darkest near the base. *Calyx* silky, two-lipped, with an extremely minute bracteola; the upper lip emarginate, the lower entire. *Corolla* about the size of *L. perennis*. *Pods* narrow, straight, rather shaggy, contracted round the seeds.

A very beautiful perennial Lupine, introduced from California by the Horticultural Society, and hitherto but little known It has been called in the Society's Garden a *dwarf Lupinus rivularis*, and I find the specimens in my herbarium marked as "*very near L. rivularis*" in the hand-writing of Dr. Agardh. Nevertheless, the affinity of the species seems to be less with *L. rivularis* than with *L. nootkatensis*, for it has nothing of an arborescent habit.

Independently of that mark of distinction from *L. rivularis* it has a stem not even half the size, sweet-scented flowers, and shaggy legumes.

The decumbent habit of this species renders it well suited for a bed in a flower-garden; it produces a great profusion of its pale, many-coloured flowers, breathing the sweet perfume of the field bean, during all the months of May and June; after which it ripens its pods, and remains shabby for the rest of the year.

Miss Drake del.

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1980

* DIPÓDIUM punctátum.

Dotted Dipodium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

DIPODIUM, *R. Br.* *Perianthium* patens, petalis sepalisque æqualibus. *Labellum* subconforme, utrinque infra medium auriculatum, disco barbatum, basi saccatum et cum columna connatum. *Columna* erecta, marginata, semiteres. *Anthera* membranacea, bilocularis? *Pollinia* 2, obliquè biloba, caudiculis duabus glandulæ communi affixis.——Herbæ *terrestres*, *aphyllæ*. Radix *crassa*, *ramosa*. Caules *squamosi*. Racemi *speciosi*. Gen. et sp. Orch. 186.

D. *punctatum*; squamis radicalibus distantibus, labello recto disco pubescente. *Ibid.* 186.
D. punctatum. *R. Brown prodr.* 331.
Dendrobium punctatum. *Smith exot. bot.* 1. 21. *t.* 12.

Radix *fibrosa*; *fibris quibusdam horizontalibus, crassis, succulentis. cæteris filiformibus perpendicularibus.* Caulis *fusco-purpureus, glaber, teres,* $1\frac{1}{2}$*-2-pedalis, distanter vaginatus, squamis brevibus obtusis.* Racemus *cylindraceus, laxus; pedunculis lætè purpureis subhorizontalibus.* Perianthium *fusco-purpureum, maculis sanguineis conspersum*; sepalis petalisque *lineari-oblongis subæqualibus.* Labellum *oblongum, trilobum, basi pubescens sulco exaratum, saccatum, cum basi columnæ breviter connatum, trilobum*; lobis lateralibus *angustis falcatis recurvis disco pilosis*, intermedio *oblongo, plano, apiculato, basi angustato, disco villoso.* Columna *erecta, semiteres, truncata, margine glandulosa; clinandrio denticulato*; stigmate *brevi, transverso.* Pollinia *duo, postice exarata, caudiculis binis glandulæ sublunatæ affixis.*

A most curious, leafless, terrestrial Orchidaceous plant, with thick fleshy fibrous roots, and purple spotted flowers; for which I have to thank the inexhaustible collection of the Messrs. Loddiges.

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* Δις *two*, and πους ποδος, *a foot*; in allusion to the two stalks of the pollen masses.

Dr. Robert Brown found it both in New Holland and Van Diemen's Land; but it would appear to be rare in the latter island, as Mr. Gunn has sent very little of it home in his rich collections, of which it forms No. 127. Mr. Allan Cunningham met with it in sandy forest ground in the colony of Port Jackson, and beyond the Blue Mountains, flowering in December.

Fig. 1. is the column; 2. the labellum seen from above; 3. the pollen masses, half of one of them being cut away.

Miss Drake del. Pub by J. Ridgway 169 Piccadilly Aug. 1. 1837. J. Watts sc.

CLÁRKIA rhomboídea.

Entire-petalled Clarkia.

OCTANDRIA *MONOGYNIA.*

Nat. ord. Onagraceæ
CLARKIA. *Suprà, vol.* 13. *fol.* 1100.

C. *rhomboidea;* petalis integris rhomboideis. *Douglas in Hooker fl. boreali-amer.* 1. 214.
C. gauroides. *Hort.*

An annual, nearly destitute of pubescence, except upon the ovary and other parts of the flower. *Stem* one to two feet high. *Leaves* ovate, or linear oblong, shorter than the internodes. *Flowers* on short stalks, axillary, shorter than the leaves. *Ovary* slightly downy. *Calyx* 4-parted, reflexed, pubescent; with the segments longer than the tube, which is smooth inside. *Petals* purple, rhomboidal, white, blotched with purple near the base, where they are dilated and toothed. *Disk* epigynous, annular. *Stamens* 8, alternately smaller, each arising from the back of a roundish villous scale; those opposite the petals the smallest, and destitute of pollen.

Found among some of the seed-papers sent from North-West America, by Mr. Douglas, on his last expedition, and raised in the Garden of the Horticultural Society, where it flowers in the middle of summer.

This species is, botanically, very interesting, on account of its flowers indicating the nearest approach yet known

* See folio 1100.

among Onagraceous plants to the indefinite stamens of Myrtaceæ. The whole genus, indeed, shews this to a certain extent, but in no case so distinctly as in that before us. In the genus Eucharidium there are but four stamens; in Godetia there are eight; in Clarkia pulchella there are 12, of which the first whorl is perfect, the second rudimentary, the third in the form of narrow glandular scales at the base of the perfect stamens; in Clarkia elegans there are 16, the first whorl of which is perfect, the second striate but not rudimentary, the third in the form of small round hairy scales at the base of the imperfect stamens, and the fourth in the state of smaller scales at the base of the perfect stamens; and in Clarkia rhomboidea the two whorls of scales are equally perfect, while the stamens are in the same state as in C. elegans.

This is indicated in the plate, where fig. 1. is a section of the tube of the calyx of *C. elegans*, fig. 2. of *C. rhomboidea*, fig. 3. of *C. pulchella*.

Nearly allied to *C. rhomboidea* is an unpublished species in Douglas's Californian herbarium, the character and name of which may be briefly stated thus—

C. *unguiculata;* foliis oblongis sessilibus dentatis, ovariis calycibusque villosis, petalis unguiculatis limbo subsagittato rotundato ungue duplò breviore.

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* RHODODENDRON arbóreum; *var.* cinnamomeum.

Cinnamon-coloured Tree Rhododendron.

DECANDRIA *MONOGYNIA.*

Nat. ord. Ericaceæ.
RHODODENDRON. Suprà, vol. 1. *fol.* 37.

R. *arboreum. Suprà vol.* 20. *fol.* 1684.
δ. *cinnamomeum;* floribus candidis, foliis subtùs cinnamomeis.
R. cinnamomeum. *Wallich in litt.* 1824. *Cat. herb. ind. no.* 760.

This variety of the Indian Tree Rhododendron is very like the white sort already figured in this work at fol. 1684; but it appears to differ in having the clusters more compact, the purple spots on the corolla larger, darker, and more numerous, the white less clear, and the leaves covered on the under side with a clear, bright, cinnamon-coloured fur.

About the year 1822, a considerable quantity of seed of this plant was sent to England by Dr. Wallich, through the Honourable Court of Directors of the East India Company; but the plants that were thus obtained do not appear to have blossomed before that which furnished the accompanying drawing, in the Nursery of Messrs. Rollisson of Tooting, in April last.

It has been supposed that it was *R. campanulatum* which Dr. Wallich intended by the name of *cinnamomeum,* and that the former name was given by Mr. Herbert, and adopted by Mr. Don, to the same plant as the latter. But this does not seem to be Dr. Wallich's opinion, for while

* See folio 1240.

the plant now figured is the No. 760 of his Indian Herbarium, and there called R. cinnamomeum, as is proved by his specimens, R. campanulatum is included in the same collection at No. 756.

Mr. Herbert informs me that the old white variety of R. arboreum is hardy, and has stood 12 or 13 years in the garden at Spofforth; this may therefore be supposed to possess the same quality.

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PRÍMULA venústa.

Purple Auricula.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Primulaceæ.
PRIMULA. *Suprà, vol.* 7. *fol.* 539.

P. *venusta;* foliis oblongo-obovatis undulatis glabris repando-denticulatis, floribus umbellatis nutantibus, calyce tubuloso quinquefido. *Hort. Fl. Austr.* 1. 248. *Reichenb. pl. crit.* 7. *t.* 851.

" P. Freyeri, *Hoppe.*" *sec Reichenb.*

Brought from the Botanic Garden, Vienna, in 1833, by the Hon. W. F. Strangways, from whom was received the specimen that furnished the accompanying figure in May last.

The species was first distinguished from P. auricula by Host, on account of its smooth toothletted leaves, long-tubed calyx, and purple flowers; he had procured it from the hilly parts of Hungary, about Hladnik, and also from Mount Baldo. Reichenbach, upon various authorities, adds the crevices of rocks at Krain near Idria, the alps of Kobila, and Laybach, placing the species near *glutinosa* and *carniolica* at a distance from *P. auricula.* In fact it seems to differ from *P. carniolica* chiefly in its more obovate denticulated leaves.

Mr. Strangways suspects that, as there are amongst the garden Auriculas varieties which from length of tube, form of limb, &c. do not appear to have come from one original species, this may have been in part their parent, a conjecture which the eye of the corolla much strengthens.

Miss Drake. del. Pub by J. Ridgway 169 Piccadilly Sept. 1. 1837. J. Watts. sc.

* DELPHINIUM intermédium; *var.* cœruléscens.

Downy-leaved variable Larkspur.

POLYANDRIA *TRIGYNIA.*

Nat. Ord. RANUNCULACEÆ.
DELPHINIUM. Suprà, vol. 14. *fol.* 1192.

D. intermedium, *Suprà, fol.* 1963.
Var. *cœrulescens;* caule glabro, petiolis foliisque subtus bracteis pedicellisque pilosis, racemo longissimo ramoso.

A third and very striking variety of Delphinium intermedium (see fol. 1963 and 1969), with the palest flowers of any I am acquainted with, and perhaps also the tallest stem. It has rather smaller flowers than the kind last figured, its leaves and leaf-stalks are downy, especially the former on the under side, and there are many weak long hairs on the bracts and pedicels. These circumstances shew how unimportant is the hairiness of the leaves, stem, and flowers, in this genus.

The leaves have their base decidedly truncate, as in the supposed species D. palmatifidum, which has already been shewn (fol. 1963) to be a simple variety of D. intermedium.

Our drawing was made in the garden of the Horticultural Society, in July, 1836.

* See folio 1503.

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* GRABÓWSKIA boerhaaviæfólia.

Boerhaavia-leaved Grabowskia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. SOLANACEÆ.

GRABOWSKIA Schlechtendahl in Linnæa vol. 7. *p.* 71. *Calyx* subcampanulatus regulariter 5-dentatus æstivatione valvari. *Corolla* e tubo brevi infundibuliformis, limbo 5-partito, laciniis patentibus reflexisve, quatuor æstivatione convolutiva, quinta externa marginibus suis vicinarum margines obtegens. *Genitalia* exserta. *Stamina* 5 æqualia, filamentis paulo supra tubi basin liberis, medio dense villosis (villis basin versus decrescentibus). *Stylus* teres, stigmate subcapitato aut leviter bifido. *Germen* 4-loculare, loculamentis 1-ovulatis. *Bacca* calyce persistente suffulta, globosa, dipyrena, pyrenis lignosis bilocularibus, loculis 1-spermis. *Embryo* hamato-curvatus, cylindricus. ——Frutex *habitu* Lycii *genuini ramosissimus,* spinis *axillaribus horridus;* foliis *sparsis integerrimis.* Flores *axillares c. fasciculis foliorum (ramulo non evoluto); aut subcorymbosi in ramulis summis (hinc in ultimis ramis quasi paniculati).*

G. *boerhaaviæfolia.* Schlecht. l. c.
Lycium boerhaaviæfolium. *Linn. suppl. p.* 150. *Lam. Encycl.* 3. 510. *Willd. Sp. pl.* 1. 1060.
Ehretia halimifolia *L'Herit. Stirp.* 1. 45. *t.* 83.
Lycium heterophyllum. *Murray Comment. gott.* 1783. *p.* 6. *t.* 2.

Flores *oppositifolii, solitarii.* Calyx *carnosus, subregularis, sæpius latere fissus.* Corolla *pallida, plumbeo-cœrulea, æstivatione imbricata, laciniis margine reflexis, venis viridibus reticulatis ad basin; seriebus quinque pilorum succulentorum articulatorum faucem filamenta et tubum a basi staminum occupantibus.* Discus *aurantiacus, carnosus, citò, ovario crescente, absorptus.* Ovarium *carnosum,* 4-*loculare; ovulo solitario sphærico ascendente in quoque loculo;* stylus *simplex, glaber;* stigma *incrassatum, viride, utrinque declive, vix bilobum.*

A spiny scrambling shrub, with singular fleshy, glaucous leaves, which give it a grey appearance, like Atriplex Hali-

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* Named by Professor von Schlechtendahl after Mr. H. Grabowsky, an apothecary of Ohlaf, and together with Wimmer, the author of a good Flora Silesiaca.

mus. It is hardy enough, in the garden of the Horticultural Society, to live out of doors against a south wall, where it does not suffer at all in moderate winters; even in the last severe one it was not much injured. Notwithstanding the dull aspect of both leaves and flowers, it forms a pleasing appearance when mixed with other and greener plants.

It is a native of Brazil, where Sellow found it in the fields and woods of the southern provinces, a common shrub, growing from 6 to 10 feet high. It is also found in Peru.

Professor Schlechtendahl considers that this genus, strangely enough referred to Lycium, connects Nolana with Solanaceæ, by its drupaceous fruit. But, notwithstanding the resemblance between the unpublished shrubby Nolanas and certain plants now referred to Lycium, I believe that the two genera are really very distinct. The fruit of Grabowskia, like that of all other Solanaceæ is dicarpellary, with the carpels posterior and anterior; and even in the anomalous plurilocular instances of Datura, and more particularly of Nicotiana multivalvis and Solanum Lycopersicum, the same plan is adhered to in reality, although it is very much obscured either by the production of spurious dissepiments, or by the addition of a whorl of carpels exterior to the normal pair. But in Nolana the ovary is constantly formed upon a quinary type; an important difference in a systematical point of view.

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* MAXILLÁRIA Steélii.

Mr. Steel's Maxillaria.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.
MAXILLARIA. *Suprà, vol.* 11. *fol.* 897.

M. *Steelii;* caule pendulo nano ramoso squamato: ramulis monophyllis, foliis longissimis flagelliformibus canaliculatis, floribus solitariis axillaribus, sepalis petalisque oblongis obtusiusculis, labello trilobo, lobis lateralibus erectis rotundatis: intermedii bilobi laciniis rotundatis subcuneatis divergentibus callo baseos elevato apice obtuse tridentato.

M. Steelii. *Hooker in bot. mag. t.* 3573.

Folia 3-4 *pedes longa, apice subulata.* Flores *flavi, maculis atro-purpureis irregularibus tigrini; labellum potiùs interruptè venosum quam maculatum.* Columna *semiteres.* Pollinia 4, *in glandulam transversam utrinque aristatam sessilia, per paria distincta glandulæ agglutinata.*

A native of Demerara, where it would seem to be common if we are to judge from the large quantity of it that has been introduced within these two last years. When it first came over I called it *Maxillaria flagellifera,* in allusion to the thong-like leaves, and under that name it exists in many collections; but the name not having been published must, of course, give way to that of *M. Steelii,* under which it was first described, in May last, by Sir W. Hooker.

It is not only a very remarkable plant on account of the strange appearance of the leaves, but really a beautiful species, as must be obvious from the accompanying figure taken in September, 1836, from a plant in the possession of Messrs. Loddiges.

It has no very obvious affinity with any known species; but the truth is that we know as yet so little of the genus, which no doubt abounds in species, that the determination of affinity is of no great importance. The most useful thing to do at present is to describe the species, and when the means of doing so are more exhausted it will be time enough to think of their final arrangement. As a contribution to this labour I take the present opportunity of noticing the following.

M. *Rollissonii;* acaulis, pseudobulbis subrotundis compressis subbifoliis, foliis oblongo-lanceolatis acutis apice recurvis, scapis unifloris diffusis laxè vaginatis unifloris, sepalis carinatis lateralibus basi subæqualibus petalisque

* See folio 1428.

acutissimis, labelli lobis lateralibus ovatis angustis acutis intermedio oblongo membranaceo apiculato margine deflexo: callo disci elevato carnoso anticè transverso lobos laterales labelli conjungente medio producto truncato tridentato et denticulis utrinque reflexis posticè fornicato truncato bilobo.——Brazil; in Messrs. Rollisson's collection. Flowers pale lemon colour; labellum dotted with purple in the middle. *Next M. stapelioides.*

M. *acicularis*; (Herbert mss.) subcaulescens, pseudobulbis subfusiformibus sulcatis diphyllis basi squamosis, foliis linearibus acuminatis canaliculatis dorso convexis, pedunculis arctissimè squamosis axillaribus unifloris, perianthio connivente, sepalis petalisque ovatis acutis, petalis obtusioribus, labello indiviso oblongo obtuso disco illinito: callo lineari apice rotundato integro.——Brazil; in the collection of the Hon. and Rev. W. Herbert. ——Flowers purplish chocolate. I only know this from a drawing by Mr. Herbert. The structure of the flower requires to be re-examined. The pollen I have not seen at all. *Affinity uncertain, except with M. uncata.*

M. *uncata;* caulescens, pseudobulbis in axillis squamarum membranacearum iisque brevioribus teretibus sulcatis monophyllis, foliis linearibus canaliculatis obtusis, lateralibus basi maximè productis petalis sepaloque supremo quadruplò majoribus, labello oblongo obtuso carnoso margine crispo membranaceo basi angustato disco unicalloso, columnâ apice utrinque uncatâ.——Demerara; in the collection of Messrs. Loddiges.

M. *chlorantha;* acaulis, pseudobulbis ovalibus compressis monophyllis, foliis ligulato-oblongis obtusis lucidis basi in petiolum canaliculatum angustatis, sepalis patulis subæqualibus linearibus acutis lateralibus basi parùm obliquis, petalis linearibus conniventibus, labelli trilobi oblongi lobis lateralibus nanis obtusis planis intermedio producto ovato carnoso granulato crispo: callo solitario ovato.——Demerara; in the collection of Messrs. Loddiges.——Flowers small, yellowish green, sweet-scented.

M. *variabilis;* (Bateman mss.) caulescens, pseudobulbis ovalibus compressis squamis membranaceis longioribus monophyllis, foliis lineari-ligulatis obtusis emarginatis planiusculis, floribus axillaribus solitariis, sepalis lineari-oblongis acutis petalis subæqualibus lateralibus basi parùm productis, labello oblongo retuso carnoso basi membranaceo venoso medio utrinque contracto, callo disci parvo ovato obtuso integerrimo, columnâ clavatâ, antherâ pubescente.——Mexico; in various collections.——Flowers small, deep purple. Known in the gardens under the names of M. atropurpurea and M. concinna. *Near M. platypetala.*

M. *tenuifolia;* caulescens, pseudobulbis ovato-oblongis compressis monophyllis squamis longioribus, foliis lineari-lanceolatis acutis recurvis, pedunculis axillaribus solitariis basi squamatis, ovario denudato arcuato, floribus cernuis, sepalis ovato-lanceolatis margine revolutis subæqualibus reflexis lateralibus basi subæqualibus, petalis ovatis obtusis conniventibus, labello oblongo indiviso apice ovato reflexo infra apicem utrinque contracto, callo disci oblongo integerrimo.——Mexico; found near Vera Cruz by Mr. Hartweg. ——Flowers rich purple, spotted and broken into small yellow patches. *Near M. platypetala.*

With regard to the limits of the genus Maxillaria, the reader will find some observations at the end of folio 1991.

del. ... J. Ridgway 169 Piccadilly Sept. 1. 1837. S. Watts. sc.

* CRÓCUS pusíllus.

Tiny Crocus.

TRIANDRIA *MONOGYNIA.*

Nat. ord. IRIDACEÆ.
CROCUS. Suprà, vol. 17. *fol.* 1416.

C. *pusillus ;* tunicis cormi basi circumscissis lævibus, sepalis petalisque diversicoloribus erectis incurvis, fauce nudâ, stigmatibus spathulatis cucullatim convolutis indivisis (staminibus longioribus).
C. pusillus. *Tenore Fl. Nap.* 3. 33. " *Mem. sopr. Croch. p.* 8. *t.* 2." *Gussone fl. sic.* 1. 30. *Ten. syllog.* 28.
C. biflorus var c. Tenorii. *Reichenb. fl. excurs.* 1. 84.
C. Tenorii. *Gay in Bull. univ. Jul.* 1837, sec. Tenorium.

Nothing can well be more agreeable to a Botanist than to trace with certainty the origin of a garden plant, which, after centuries of domestication, has lost all record of its origin, and much trace of its native aspect. Even in the case of a Crocus, such an enquiry is far from uninteresting.

We have had in the gardens, time out of mind, what is called the Scotch Crocus, to which the equally unintelligible name of *C. biflorus* was first given in his Dictionary by Miller, who only knew that it was unquestionably a peculiar species. It was neglected by Linnæus and his followers, and is not even adverted to in Willdenow's Species plantarum, or Persoon's Synopsis. It is, however, admitted into Römer and Schultes's Systema Vegetabilium, upon the authority of the Hortus Kewensis, but is supposed to be a variety of C. vernus, and its native country is said to be unknown. In one of the

* See folio 1416.

Mantissas of the same work various synonyms are added from Bieberstein and others, from which it is to be inferred that it is a Caucasian plant; but it is probable that all those synonyms are spurious, and consequently they throw no light upon its origin.

By degrees, however, a suspicion arose that *Crocus pusillus*, a plant originally described by Tenore in his Flora Napolitana, but with incorrect synonyms, might be the same as C. biflorus, and Reichenbach even refers the new species of Tenore to the latter. Specimens, for which I am indebted to the Hon. W. F. Strangways, to a great extent confirm the correctness of the modern opinion, and render it extremely probable that our garden Scotch Crocus is a native of the southern parts of Italy; and owes its peculiar appearance to long years of domestication.

It is this very pretty wild plant that the accompanying plate is intended to illustrate. The colours are more strongly marked here than in the Scotch Crocus, and the peculiar striation of the sepals of that plant is hardly traceable; all the parts moreover are smaller, and the anthers are shorter than the stigmas, instead of equalling them in length. But the peculiar dull, dirty yellow of the sepals, the texture of the tunics of the cormi, and especially the form and undivided structure of the stigmas, on which I am disposed to put much reliance, are all characters of correspondence between these two, and, I think, afford reasonable evidence of their identity. Nevertheless, I have not absolutely combined them, but figure this plant as I find it, leaving it to those who agree with me in opinion, to add the synonyms of C. biflorus should they think proper.

According to Tenore, C. pusillus inhabits sterile submountainous pastures of the valleys of S. Rocco and of Orsolone near Naples, about Montescaglioso, Potenza and elsewhere in Lucania. Gussone finds it near Caronia, Mistretta, S. Fratello, Montalbano and Floresta in Sicily; and Reichenbach says that it occurs on sterile hills near Parma, and in the Roman states.

Fig. 1. is an expanded flower; 2. shews the stamens and stigmas.

Miss Drake del. Pub by J. Ridgway 169 Piccadilly Sept. 1. 1837. J. Watts sc.

* PHARBÍTIS diversifólia.

Three-lobed Convolvulus Major.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Convolvulaceæ.

PHARBITIS. Calyx 5-sepalus. Corolla campanulata aut campanulato-infundibuliformis. Stylus 1; stigma capitato-granulatum. Ovarium 3 rariùs 4-loculare, loculis dispermis. *Choisy convolv. orient. p.* 56.

P. *diversifolia;* foliis cordato-acuminatis pubescentibus integris trilobisque auriculis divergentibus, pedunculis folio brevioribus subbifloris, sepalis ovato-lanceolatis acutis.

Annua, *P. hispida duplò minor, sed facie admodum simili.* Folia *prima cordata integerrima, subinde angulata, demum triloba formâ omninò P. hederaceæ.* Corolla *purpurea radiis sanguineis, margine integra, cæterum P. hispidæ simillima, sed duplò minor.* Capsula et semina *omnino P. hispidæ.*

A very pretty little half-hardy annual, about half the size of the common Convolvulus major, of which it has very much the appearance. It differs, however, in constantly producing at the latter part of the year 3-lobed leaves, instead of entire ones, so that specimens of the same plant collected at different seasons would be thought essentially different. In the first stage of its growth, it is like P. hispida; at the next it resembles P. hederacea, only that the calyx and inflorescence are distinct.

A native of Mexico, whence seeds were obtained by Geo. F. Dickson, Esq. and by him presented to the Horticultural Society; it also grows in Peru, where it was found by Mr. Mathews in a 3-lobed state (No. 2050); and I think I have a garden specimen in the entire state, from Chile, which has been marked P. purpurea, in my herbarium, by M. Choisy himself.

* So called from φαρβη, colour, on account of the elegance and variety of colour in the flowers.

Pub by J. Ridgway 169 Piccadilly Sept. 1. 1837.

* SILÉNE chloræfólia.

Armenian Catchfly.

DECANDRIA *TRIGYNIÀ.*

Nat. ord. SILENACEÆ.
SILENE. *Suprà, vol.* 3. *fol.* 247.

S. *chloræfolia ;* glaberrima glutinosa glauca, caulibus ramosis, foliis subrotundis acuminatis superioribus subcordatis, floribus solitariis axillaribus terminalibusque, calycibus clavatis estriatis, petalis coriaceis rotundatis bilobis dorso discoloribus, appendicibus bilobis carnosis acutis.
S. chloræfolia. *Smith ic. ined.* 1. *t.* 13. *Bot. mag. t.* 807. *De Cand. prodr.* 1. 1381.

There is not a hardy plant in our gardens that is less treated according to its merits than this Silene chloræfolia. It is one of the neatest of all herbaceous plants in its broad, trim, firm, well-coloured leaves, and its compact manner of growth ; the flowers are of the purest and brightest white, and are deliciously fragrant ; it is quite hardy, if not exposed to a wet soil in winter, is easily increased both by seeds and cuttings, and thrives equally whether grown as a rock plant or in the common flower border. Yet we hardly ever see it in the gardens. It has every good quality that a garden flower should have, and so far as I know, not a single defect, and nevertheless it is scarcely thought of or heard of. May I hope that this notice will gain for it that attention which it so eminently deserves.

When grown upon rock-work, its flowers are only about half the size they acquire in a deep rich light soil ; the accompanying figure was taken from a plant in the former situation in the garden of the Society of Apothecaries at Chelsea.

It was found in Armenia by Tournefort, and was introduced so long since as 1796, by Mr. Hunneman.

* See folio 1444.

Watts. sc.

* TÚLIPA scabriscápa.

Rough-stemmed Tulip.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ.

TULIPA. Suprà, vol. 2. fol. 127.

T. *scabriscapa;* bulbo solido prolifero tunicâ castaneâ lævi obtecto; scapo pubescente scabro, foliis glaucescentibus flaccidis subundulatis, sepalis acuminatis, germine prismatico-triangulari stigmate plus minusve angustiore. *Strangways in litt.*

Like many other garden flowers, the Tulip has in its cultivated state assumed appearances so unlike what are proper to it when wild, that it is only after long and patient investigation that the garden varieties can be referred to their original species. Mr. Strangways' residence at Florence, and the enquiries he was able to institute into this subject, have enabled him to investigate the genus successfully, and I am extremely indebted to him for the following interesting memoranda, drawn up with reference to the four Tulips represented in the annexed plate, from specimens supplied out of the garden at Abbotsbury.

"This name (*T. scabriscapa*) would unite four different varieties of tulip, found wild near Florence, which do not appear to differ specifically one from the other, while they agree in several characters, the most remarkable as well as the most constant of which (in the wild plants) is the roughness of the stalk. They were first noticed, though under a different arrangement, by M. Reboul, a French gentleman residing at Florence, to whom, however, only two varieties seem to have been known, viz. Nos. 3 & 2.

No. 4. T. scabrisc. *var. primulina*, is that which may be taken as the type of the species, both as being most distinct in colour and character from all the other wild Tulips with which Tuscany abounds; and as being the least variable of the four varieties here represented. Indeed the only frequent variation observable in it, is that the bases of all the petals, interiorly, are sometimes marked with a dusky spot, which at other times is hyaline or smooth and semitransparent; the same variation of colour extends also to the filaments and anthers, and, rarely, to the petals. *T.* sc. primulina was first noticed by Viscountess Hawarden in some vineyards on the slope of the hill under the Church of S. Miniato, at a short distance from Florence; it has since been found abundantly higher up the same valley. It has been introduced into some English gardens under the name of Lady Hawarden's Tulip.

No. 3. T. scabrisc. *var. strangulata.* This, in red, is nearly as invariable as *primulina* in yellow; nevertheless it has sometimes a few yellow specks which serve to unite it with No. 1. It was named strangulata by M. Reboul, from the character of the unexpanded flower, in which the tips of the petals cross each other, as if a ligature had been applied just below. He found it first at S^a. Margherita, about three miles from Florence, on the south, and afterwards in the same valley with No. 4. Its colour is a remarkably brilliant crimson, each petal having a black spot, forming an eye round the germen, not unlike that of

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* See folio 1419.

T. Oculus Solis (which, however, belongs to quite a different section of the genus). It has not, at least in a wild state, the fine yellow edging of the eye of Oculus Solis. Filaments and anthers black.

No. 1. T. scabrisc. *var. mixta.* This varies from the state of *strangulata,* with the addition of a few yellow dots, to the pied condition well represented in the plate. But it is remarkable that although an evident variety, the plants brought from their native soil have never varied back into the pure states of Nos. 4 and 3. nor are those two varieties found in the same locality with this. It multiplies the most readily of all by offsets, and is a sure flowerer, but one of the latest. It is the only one of the wild tulips cultivated in Florence for beauty. In its wild state it is slender, but becomes stronger and larger by cultivation. It has only been found in olive grounds east of Florence, and south of the Arno, between Villa Rusciana and the Bosco Rondinelli, well known to the botanists of Florence.

No. 2. T. scabrisc. *var. Buonarrotiana.* This is in many respects the most remarkable of the four. It is much the largest and stoutest plant, has a uniform tawny buff colour, not bright enough to be called orange, and has a faint but heavy and honeylike smell. In this respect, as well as its tendency (in cultivation) to become variegated in blots and patches like Gesneriana, and not in dots or specks like the three former varieties, it might be taken as the wild original of the well known Van Toll or Dutch sweet-scented Tulip. That too has pointed petals and a rough stalk, and I have no doubt is naturally connected with or derived from this division of Tulips in some way or other. But it is a dwarf to T. sc. Buonarrotiana. This was discovered some years ago by M. Reboul, in the olive-grounds of the Villa Buonarroti, at Settignano, four miles east of Florence on the north side of the Arno. He named it in honour of the great Michael Angelo Buonarroti,* and described it as it is, "*coloro vitellino,*" in a single sheet descriptive of the wild Tulips of Florence as far as then investigated, which he printed several years ago. It is certainly the scarcest of the four varieties.

These four Tulips agree in the form of their flowers, which are elegantly cup-shaped, well expressed in the figure No. 3, petals pointed, though less so than in O. Solis; germen prismatic, stigma overhanging, not so large as in Gesneriana, bulb smooth, scape rough, pubescent, or even hairy in strong plants, in which they differ from all other Tulips. The petals of all have two strong furrows down the middle. Their leaves are glaucous, more or less undulated. They may possibly be the original stock of a tribe of second rate garden tulips, neglected for the more showy varieties of T. Gesneriana, which are met with in some of our gardens, and which betray their origin by their pointed petals, honey smell, and more or less pubescence on the stalk.

Of these garden varieties the Van Toll has been noticed; those that are in cultivation at Florence are either the improved No. 1. *mixta,* or a large very double sort, of a mixture of white, pink, and green pointed petals, short scape, smooth as far down as one or two green or partly coloured leaves like bracteæ, and *rough below* them, where the true scape begins; the upper smooth part with its leaves (detached petals) being in fact a monstrous, elongated flower; also some English or Dutch, pink or lilac, and white with pointed petals, and stalks pubescent towards the base; that called the early Edgar is one of this set. In cottage gardens in the West of England are often seen two varieties that can only be referred to this class of Tulips: one is exactly the *strangulata* of Florence with a perfectly smooth stalk; the other a handsome variety of the same, having the black and yellow eye of O. Solis, from which, however, it differs in every important character.

These pointed petaled Tulips are frequently introduced into Italian paintings: and in the gallery Gualtieri at Orvieto are six oblong pictures of flowers, with the date 1614, in which many of these tulips are represented; besides other flowers, with the Italian names of that time."

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* This villa still remains in the Buonarroti family; and there is a spirited sketch of a Satyr, drawn with a hot iron upon a door within the house, which is attributed to the great Michael Angelo.

Miss Drake del. Pub by J. Ridgway 169 Piccadilly Sept 1. 1837. J. Watts sc.

* CYPRIPÉDIUM purpurátum.

Purple-stained Lady's Slipper.

GYNANDRIA *DIANDRIA.*

Nat. ord. ORCHIDACEÆ, § CYPRIPEDIEÆ.
CYPRIPEDIUM. Suprà, vol. 10. *fol.* 788.

C. *purpuratum ;* foliis oblongis acutis striatis maculatis basi equitantibus, scapo aphyllo pubescente, sepalo dorsali acuminato ciliato margine revoluto, petalis oblongis subundulatis pubescentibus, stamine sterili lunato.

A further addition to the tropical section of the genus Cypripedium, of which C. insigne and venustum constitute the other species. It is a native of the Malayan Archipelago, and was imported by Mr. Knight, of the King's Road Nursery. The accompanying drawing was made in Nov. 1836, in Messrs. Loddiges' collection.

Not having had an opportunity of examining personally the only flower that was produced, I am unable to say any thing more of the plant than is shewn in the figure. It is manifestly distinct from the other two species in its crescent-shaped sterile stamen. Its leaves are most like those of C. venustum, but are more oblong, and far less rigid, besides having a pallid colour, quite unlike that of the species alluded to; its petals moreover want the long bearded fringe, and the dorsal sepal is convex, not concave.

(Continued from folio 1986.)

Whether or not the genus Maxillaria is well limited as it is at present understood is uncertain ; nor, till a larger number of species shall have been accurately examined, will it be safe to arrive at any conclusion upon the subject. The value of the numerous modifications of the pollen masses and glandular apparatus is, in particular, still to be ascertained. But, in the meanwhile, there is one character at least, without which it may be safely asserted that no plant

* See folio 1534.

can be a Maxillaria; namely, a labellum attached to the column by a moveable joint, or, as we technically say, articulated with the column. This is found in every true Maxillaria, and therefore I have no hesitation in separating from it a Demerara plant which flowered lately with Mr. Barker at Birmingham, in which this character is wanting. It may be called *Stenia* in allusion to the singular narrowness of the pollen masses.

STENIA.

Perianthium explanatum, subæquale, sepalis lateralibus basi obliquis. Labellum cum basi columnæ continuum, (indivisum), concavum, disco appendiculatum. Columna semiteres, basi producta, apice rotundata, mutica. Anthera bilocularis. Pollinia 4, linearia, geminata, basi sejuncta, dorsalia minima. Caudicula subquadrata acuta (pubescens).——Herba acaulis, ebulbis. Folia oblonga, basi angustata, apice recurva. Flores solitarii, radicales, basi ovarii bracteolati.

1. Stenia pallida. *Bot. reg. ic. ined.*

There is moreover an unpublished genus, called Huntleya by Mr. Bateman, in compliment to the Rev. J. T. Huntley, an ardent cultivator of Orchidaceous plants (see fol. 1721 of this work), of which the original species was found, according to a memorandum I have received from Mr. Bateman, in Demerara by Mr. Schomburgk, and of which another and very fine species occurs among Mons. Descourtilz's Brazilian drawings. These plants manifestly differ from Maxillaria in combining with the distichous habit of a Vanda, a flat, spreading labellum, which is unguiculate with the free base of the column, and furnished with a fine fringed appendage at its base, and a column broadly winged towards the apex. This genus may be established upon the following character, which I take from the species of M. Descourtilz.

HUNTLEYA.

Perianthium explanatum, subæquale, sepalis lateralibus basi anticè involutis vix obliquis. Labellum planum, unguiculatum, rhomboideum, patens, basi longè fimbriatum, cum basi libera producta columnæ articulatum. Columna clavata, apice cucullata, margine alata. Anthera bilocularis mutica. Pollinia 4. ——Herbæ caulescentes. Folia ligulata, disticha. Flores axillares (solitarii).

1. H. *sessiliflora* (Bateman ined.); "floribus sessilibus." In Guiana Schomburgk.

2. H. *Meleagris;* floribus longè pedunculatis. In Brasilia. Epidendre fritillé *Descourtilz ic. Orch. Bras. ined. t.* 8.——Planta Vandæ omnino facie. Folia pedalia, flabellatim disticha. Pedunculi cum ovario 5 pollices longi. Flores diametro 3-pollicari, medio candidi, ultra medium Fritillariæ Meleagridis aspectu et colore vinoso. Labellum ovato-rhomboideum, acutum. Columna apice virens.

1932

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G. Barclay

* MILTÓNIA spectabilis.

Showy Miltonia.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.

MILTONIA. Perianthium explanatum, petalis revolutis sepalisque lateralibus basi connatis sessilibus conformibus. *Labellum* maximum, dilatatum, indivisum, sessile, cum columnâ leviter connatum, basi lamellatum. *Columna* nana, semiteres, apice aurita. *Pollinia* 2, caudiculæ oblongæ adnata.——Herbæ *epiphytæ, pseudobulbosæ.* Scapi *uniflori, vaginati, squamis equitantibus.* Flores *speciosissimi.*

M. spectabilis *Suprà, fol.* 1976 *(August* 1, 1837.)
Macrochilus Fryanus. *Floral Cabinet, t.* 45. (*September* 1, 1837.)

Scapus *teres, vaginatus; squamis carinatis. cartilagineis, equitantibus, obtusis, virescenti-fuscis, superioribus majoribus ovario subæqualibus.* Perianthium *patentissimum, 4-pollices longum, tres circiter latum, petalis explanatis.* Sepala *pallida, viridi-alba, oblonga, apiculata, subundulata, margine reflexa.* Petala *conformia et ejusdem coloris, sed latiora, margine crispata, revoluta.* Labellum *maximum, subrotundo-cuneatum, undulatum, cum columna continuum, violaceum, basi intensiùs margine pallidiùs,* 7*-nervatum: venis arcuatis, convergentibus, pictis, basi atropurpureis; tribus centralibus basi cristatis: cristis integerrimis anticè truncatis, intermediâ breviore, crassiore, magis elevatâ, lutescente.* Columna *brevis, erecta, compressa, petalorum colore, anticè gibbosa, lutescens, et cum basi labelli connatum; alis duabus purpureis, carnosis, acinaciformibus.* Anthera. . . . . . Pollinia.

A most beautiful Brazilian Orchidaceous plant, which I originally received from Messrs. Loddiges, and subsequently, at the end of July last, from George Barker, Esq. of Birmingham. I had promulgated the name of Miltonia spectabilis previously to hearing that Messrs. Knowles and

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* In some countries there is a difficulty in finding individuals whose love for Natural History would justify such little compliments, as the naming after them rare or beautiful plants. In this country, on the contrary, the crowd of claimants is so great as to render a selection of names an embarrassing office: and it sometimes happens that those who ought to be the earliest recognised are accidentally lost sight of. Such is the case in the present instance, where the name of a Nobleman, one of the oldest and steadiest friends of Natural Science in this country is only now, for the first time, fixed among the imperishable records of Botany. Let me hope, however, that the present beautiful genus, selected from among his favourite flowers, will be some atonement to Lord Fitzwilliam for the obliviousness of which I at least have to confess myself guilty.

Westcott had called the plant Macrochilus Fryanus, and as the former name was published a month earlier the latter will have to give way.

The genera Brassia, Miltonia, Cyrtochilum, Odontoglossium, and Oncidium are closely related, and no doubt form the nucleus of a group of Vandeæ, the limits of which remain to be ascertained. Of these, Oncidium has a column with two ears, and a distinct lobed lip; Miltonia a column with two ears, and an entire lip partially united to it at the base; Odontoglossum a winged column, and an entire lip partially united to it at the base; Cyrtochilum a winged column and a distinct entire lip; and finally, Brassia has a column that is neither winged nor eared, and a distinct entire lip. I say nothing of the tubercular processes upon the lip of all these genera, for I do not see how they will serve with any certainty to distinguish them. Moreover, Oncidium and Cyrtochilum should have unguiculate sepals and petals, while all the other genera have them sessile. While, however, such are the real distinctions between these genera, I am by no means sure that all the species now stationed under them are rightly placed. But that is a question upon which I cannot enter at this time.

Miltonia differs from Oncidium in its lip being slightly connected with the column, much dilated and undivided; and from Odontoglossum, Brassia, and Cyrtochilum, in its column being auricled, and its lip not only much larger than the sepals, but also altogether different in form.

The following are additional species of these genera.

Cyrtochilum Karwinskii; scapo paniculato, sepalis petalisque oblongo-lanceolatis apiculatis, labello obovato rigido ecristato venis centralibus incurvantibus lamellatis, margine columnæ serrato.——Teoxomulco, prope Oaxaca, Karwinski. *(Hb. reg. Monac.)*——A noble species. Flowers 2½ inches in diameter. Sepals and petals blotched with brown, upon a yellow ground.

Odontoglossum angustatum; scapo paniculato, sepalis lineari-lanceolatis acuminatis, petalis ovato-lanceolatis unguiculatis undulatis, labello ovato-lanceolato acuminato: cristâ baseos lamellatâ multifidâ, columnâ muticâ.——Super arbores in valle Lloa, regni Quitensis, alt. 8000. ped. Hall. *(Hb. Hooker.)*

Odontoglossum Hallii; scapo paniculato, sepalis petalisque ovato-lanceolatis acuminatis unguiculatis, labello oblongo acuminato pectinato; cristâ baseos lamellatâ multifidâ, columnæ alis bidentatis dente superiore aristato.——Supra arbores in valle Lloæ regni Quitensis, alt. 8000 ped. Hall. *(Hb. Hooker.)*—— A most beautiful species. Flowers blotched with brown upon a yellow ground, 3½ inches in diameter.

1993

Miss Drake del. Pub. by J. Ridgway 169 Piccadilly Oct. 1 1837

9 Correct. (Earl E. Sheffl)

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CRÓCUS Imperáti.

Imperato's Crocus.

TRIANDRIA *MONOGYNIA.*

Nat. Ord. IRIDACEÆ.
CROCUS. Suprà, vol. 17. *fol.* 1416.

C. *Imperati;* tunicis radicalibus membranaceo-filamentosis, foliis proteranthiis glaucescentibus basi latioribus deflexis, scapo supra basim vaginifero, spathâ duplici opacâ, corollæ tubi campanulati laciniis ovalibus obtusis emarginatis, fauce nudâ aurantiacâ, stigmate incluso trifido staminibus longiore lobis cuneiformibus incisis crenulatis, capsulâ oblongâ acuminatâ 6-striatâ, seminibus fulvis reticulato-erosis altero latere excavatis. *Tenore syllog. p.* 28.

For the specimens of this charming plant I am indebted to the Hon. W. F. Strangways, who has furnished me with the following note upon it.

"Crocus Imperati, so named by Professor Tenore, after an old Italian Botanist Imperato, is, perhaps, the most beautiful of the genus. It varies greatly in the size of the flower, which is sometimes very large, and rises from a double spathe; the bulb, which is covered with irregularly interwoven fibres, is comparatively small.

"Although it belongs properly to the set of vernal crocuses, it seems to connect them with the autumnal, beginning to flower in the middle of winter. It is fortunate that, flowering at such a season, it requires less sun to expand its blossoms than any other species.

"It increases readily by seed, which ripens in May. The diffuse character of its leaves, which are of a dark green, and appear long before the flower, is one of its distinguishing marks: seen before the buds appear, they might be taken rather for the leaves of some autumnal species that had done flowering, than for those of a spring crocus coming on.

"The variety albiflorus is the most beautiful of the white crocuses—it is rather more decidedly vernal than this, which is the common form of the species.

"There has been much controversy between Italian Botanists on the identity, as a species, of this and Crocus suaveolens of Bertoloni, of which a short notice is given below.

"The habitats of these crocuses are—C. Imperati, of this figure; in profusion all about Castellamare, La Cava and Salerno, and other parts to the south of Naples, in every hedge bank to the height of 2000 feet or more above the sea. It is wonderful that so fine a plant has not attracted more notice in such a frequented country.

"C. Imp. albiflorus is rare, and found much higher up the mountains.

"C. suaveolens, *Bert. Fl. Ital.* is found in the pass called Le Gole d'Itri, near the town of that name; and also in the Valle d'Inferno, about two miles from Rome, behind St. Peter's.

"C. suaveolens, *Bert. Fl. Ital.* has the petals lanceolate pointed, the spathe one-leaved, the stigma filiform, pale orange or yellow. It is sweet scented; the leaves are short, appearing with or little before the flower. The petals are seldom finely veined as in Imperati; it blossoms regularly later in the spring, February and March."

Add to the description of Tulipa florentina *the following note.*

The Tulips figured under the name of T. pubescens in Sw. B. Fl. Gard. pl. 9, are some of the garden varieties alluded to in the foregoing description: the name pubescens has not been adopted, because the pubescence is not constant even in the cultivated plants, which alone Sweet professes to describe.

Miss Drake delt. Pub by J. Ridgway 169 Piccadilly Oct. 1 1837 G Barclay sc

* ONCIDIUM Cebolléta.

Chive-leaved Oncidium.

GYNANDRIA *MONANDRIA.*

Nat. ord. Orchidaceæ, § Vandeæ.
ONCIDIUM. *Suprà, vol.* 13. *fol.* 1050.

O. *Cebolleta;* foliis radicalibus teretibus subulatis, scapo paniculato rigido glutinoso, sepalis petalisque obovatis acutis concavis unguiculatis, labelli laciniis lateralibus obovatis retusis intermediâ reniformi undulatâ emarginatâ, cristâ unidentatâ truncatâ basi tuberculosâ, alis columnæ parvis carnosis.

Epidendrum Cebolleta. *Jacq. stirp. Amer. p.* 230. *t.* 131. *fig.* 2.

Oncidium Cebolleta. *Swartz. act. Holm.* 1800. *p.* 240. *Willd. sp. pl.* 4. 113. *Gen. & Sp. Orch. p.* 206.

It is, I presume, impossible to determine with certainty to which, out of two or three taper-leaved Oncidiums, the name of Cebolleta was applied by Jacquin; for he neither describes nor figures the flowers of his plant. In this uncertainty let the present, which agrees with the description of that Botanist as far as it goes, bear the name. It is a native of the Spanish Main, whence it was obtained by Messrs. Lowe and Co. of Clapton, who flowered it in February, 1836.

It is clearly distinguished from O. nudum by the lateral lobes of its lip being obovate, and by the nature of the tuberculated crest at its base. In all probability O. juncifolium combined by me with O. Cebolleta will form another species, but I do not possess the materials for defining it.

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* See folio 1830.

Jacquin found O. Cebolleta in the woods of Carthagena, especially near the coast; and he says that the young pseudo-bulbs, pounded with salt, are of great repute as an external application in extensive bruises, broken bones, and other surgical cases.

O. *nudum* (Bateman); facie Cebolletæ sed sepalis petalisque subsessilibus rotundatis acutis concavis, labelli lobis lateralibus linearibus recurvis intermediâ obovatâ emarginatâ, cristâ callis 3 linearibus in fronte lunulâque crenatâ convexâ ad basin.——Hab. in Caraccis, unde in horto regio Berolinensi receptum, a Dom. Otto Batemanno meo benevolè communicatum est.

Miss Drake del. Pub. by J. Ridgway 169 Piccadilly Oct. 1. 1837 G. Barclay sc.

* CAMPÁNULA Portenschlagiána.

Dalmatian Wall Campanula.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Campanulaceæ.

CAMPANULA. Suprà, vol. 1. fol. 56.

C. *Portenschlagiana*; caule suberecto, foliis inter se æqualibus petiolatis cordatis rotundatis acutè anguloso-dentatis, floribus racemosis, lobis calycinis subulatis corolla subinfundibuliformi triplò brevioribus. *Alph. DeCand. Monogr. p.* 303.

C. Portenschlagiana. *Röm. et Schult. syst.* 5. 93. *Visiani stirp. dalm. spec. p.* 29. *et* 54.

C. muralis. *Herb. Portenschl.*

A pretty little herbaceous Campanula, introduced with so many more rarities by the Hon. W. F. Strangways, to whom I am obliged for a specimen.

It is a native of walls and rocks in Dalmatia, where it has been recently found by several Botanists, and is hardy in the milder parts of Great Britain. Like C. garganica, and fragilis, it however succeeds best if kept in a greenhouse in winter.

Two states of the species are named by M. Alphonse DeCandolle, the one quite smooth, the other velvety with down. The only wild specimens I have seen belong to the former, as does the garden plant; they were gathered near Zara by Visiani. The flowers are smaller, and the stems more diffuse and delicate than when cultivated, and the

* See fol. 1738.

tough, woody, root-like stems attest the durability of the individual, and how well it is constituted for maintaining itself in the crevices of rocks.

The species is intermediate between Campanula elatine and floribunda.

1996

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* BEGÓNIA insignis.

Noble-flowered Begonia.

MONŒCIA *POLYANDRIA.*

Nat. ord. BEGONIACEÆ.
BEGONIA. *Suprà, vol.* 1. *fol.* 284.

B. *insignis;* caule erecto succulento glabro, foliis inæqualiter cordatis oblongo-lanceolatis duplicato-aristato-dentatis suprà puberulis, stipulis lineari-triangularibus, corymbis pendulis multifloris, sepalis 4: majoribus cordato-ovatis, capsulæ alâ maximâ acutiusculâ reliquis rotundatis.
B. insignis. *Graham in New Edinb. Phil. Journal, no.* 11. *Bot. Mag.* 2900.

There is no plant in our hothouses more beautiful than this in the months of December and January, when it produces its lovely semitransparent rose-coloured flowers. Many species are more conspicuous for the size and richness of their foliage, but none for the gayness of their blossoms.

It was introduced from the Berlin Garden, and is probably a Brazilian species. We have not, however, seen any wild specimen.

It flourishes with but little care in a good greenhouse, but like all the species acquires its greatest perfection if kept in the stove, when in its most rapid growth. My drawing was made from a charming specimen belonging to Lady Antrobus.

* See folio 1252.

by J. Ridgway Piccadilly Oct. 1

C. Barclay sc.

* HORKÉLIA fúsca.

Dusky Horkelia.

DECANDRIA *POLYGYNIA.*

Nat. ord. ROSACEÆ, § POTENTILLEÆ.

HORKELIA. *Schlecht.* *Calyx* campanulatus, semidecemfidus, laciniis alternis accessoriis. *Petala* 5, parva. *Stamina* 10, biseriata, calycis parietibus inserta. *Receptaculum* conicum, siccum, villosum. *Ovaria* indefinitè numerosa. *Styli* simplices, cum ovario articulati, subterminales. *Achenia* calyce inclusa. *Schlecht. in Linnæa.* 2. 26.

H. *fusca;* glanduloso-pubescens, foliis radicalibus pinnatis 6-7-jugis laciniis cuneato-oblongis pinnatifidis vel palmatifidis incisis, paniculis corymbosis capitatis, sepalis integerrimis, bracteis palmatis capitulis brevioribus.

It is rather singular that the original species of this genus should never have been found by Mr. Douglas in California, although he detected in that part of America as many as five new species. Of these one has been published in the Botanical Magazine under the name of *H. congesta* (fol. 2880); the subject of this notice is another; and a brief account of three others, in the Herbarium formed by that Naturalist, will be found below. They are all erect herbaceous plants, resembling some Potentillas in their general aspect, but with flowers collected into heads, unguiculate petals, a campanulate calyx, and ten stamens, often with ovate petaloid filaments. They form a transition from Potentilla to the genus Sibbaldia, and thus assist in estab-

* "Named in honour of John Horkel, Professor of Physiology at Berlin, who would be admitted on all hands to be one of the first botanists of our age, if he could but be persuaded to commit to paper the treasures of his immense erudition, and of his profound knowledge of nature and of plants."—*Schlecht.*

lishing a graduated series of structure between the most highly devoloped forms of Rosaceæ, and such imperfect forms as we find in Sanguisorbeæ.

A hardy perennial, flowering from June to August, and propagating readily by means of seeds, or by division of the roots.

The other species above alluded to are the following:—

H. *cuneata;* villoso-pubescens, foliis radicalibus pinnatis 10-12-jugis laciniis subrotundo-cuneatis incisis, paniculis corymbosis capitatis, sepalis integerrimis, bracteis tripartitis capitulis villosis brevioribus.——Varies in size from a span to a foot or more in height.——California, Douglas.

H. *hirsuta;* basi hirsutissima apice glandulosa, foliis radicalibus pinnatis 7-8-jugis, laciniis angustis cuneatis incisis, paniculis corymbosis capitatis multifloris glandulosis calvis, sepalis integerrimis, bracteis brevissimis 3-5-partitis.——A very striking species, covered with long, loose, coarse hair near the base, but hairless and simply protected by minute glands towards the flowers. The corymbs are more flat and compact than in the others.——California, Douglas.

H. *capitata;* caule basi glabriusculo apice glanduloso-pubescente, foliis radicalibus pinnatis 5-6-jugis laciniis inferioribus subrotundis incisis basi cuneatis, capitulis solitariis bracteâ pinnatifidâ brevioribus, sepalis integerrimis.——California, Douglas.

Miss Drake del.   Pub by J. Ridgway 169 Piccadilly Oct. 1. 1837.   J. Watts sc.

* CYNÓRCHIS fastigiáta.

Corymbose Dog-Orchis.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § OPHRYDEÆ.

CYNORCHIS. Thouars. Sepala æqualia, conniventia. *Petala* sub sepalo superiore agglutinata. *Labellum* columna connatum, calcaratum, sæpiùs 4-partitum, sepalis multò majus et texturæ diversissimæ. *Columna* nana. *Anthera* horizontalis v. resupinata, loculis distantibus elongatis. *Rostellum* planum (v. plicatum), dilatatum, tripartitum. *Pollinia* glandulis nudis. *Stigma* lobis duobus carnosis rostelli lobis lateralibus suppositis.——Herbæ, *Africæ australis, et insularum Mascarensium;* radicibus *testiculatis.* Flores *nunquam herbacei.* Caules *sæpius squamâ vaginante in medio.* Gen. & Sp. Orch. 331.

C. *fastigiata;* foliis binis radicalibus oblongo-lanceolatis acuminatis horizontalibus, caule unisquamato, racemo corymboso, labello quadrifido: laciniis æqualibus truncatis, calcare longissimo filiformi. *Gen. & Sp. Orch. l. c.* cum synonymis.

Sepala *extus rosea intùs virescentia.* Petala *rosea, sepalo supremo agglutinata.* Labellum *pallidè herbaceum basi extùs glandulosum, sepalis 4-plò majus, roseo levissimè tinctum, basi intensiùs; calcar roseum.* Anthera *atropurpurea, brevis.* Rostellum *virescens.* Stigmatis *lobi laterales pulvinati, carnei, papillosi.* Rostellum *compressum plicatum.*

This is one of the representatives in tropical countries of the terrestrial Orchises of Europe, growing in similar situations, and having knobby roots of the same kind. It occurs in damp places in the Isle of France, and has a smell very like that of Orchis mascula.

The drawing was made in the stove of Messrs. Loddiges, in April of the present year.

* Literally Dog-Orchis.

The analytical figures of the plate will help the student to understand the complicated structure of such plants. Fig. 1. is a view of the column and lower part of the lip seen in profile; fig. 2. is the same part seen in front; *a. a.* are the lateral stigmatic lobes; *b. b.* the glands of the pollen-masses; *c.* the middle lobe of the rostellum; *d. d.* the base of the lip.

1999

Miss Drake. del. *Pub by J. Ridgway 169 Piccadilly Oct. 1. 1837.*

1999

* DELPHINIUM azúreum.

Sky-blue Larkspur.

POLYANDRIA *TRIGYNIA.*

Nat. ord. RANUNCULACEÆ.

DELPHINIUM. *Suprà, vol.* 14. *fol.* 1192.

D. *azureum ;* petiolis basi vix dilatatis, foliis 3-5-partitis multifidis, lobis linearibus, racemo stricto, petalis omnibus apice barbatis, inferioribus villosissimis. *DeCand. prodr.* 1. 54.

D. azureum. *Mich. fl. bor. amer.* 1. 314. *Deless. ic. select.* 1. *t.* 60.

The seeds from which the plant now figured was raised were collected in California, for the Horticultural Society, by Mr. Douglas; the species would, therefore, appear to range quite across the North American continent. It is very like the pale variety of D. grandiflorum, called chinense, but is readily known by its lower petals being deeply cleft into two lobes, much more hairy, and smaller.

The specimens from Mr. Douglas had flowers of a dirty pink upon a whitish ground, with a small green depression below the points of the sepals. A much prettier variety was sent me by Mr. W. Garvie, Nurseryman, Stratford, Essex, to whom it had been communicated by Mr. Murray of the Glasgow Garden, where it was raised from Mr. Drummond's Texas seeds. In that plant the flowers were a pale blue, corresponding with the specific name, and the leaves broader; a leaf and flower of this are figured at No. 2.

I am not aware of the existence of any coloured figure of this species, which is scarcely deserving of cultivation except in Botanic Gardens.

* See folio 1503.

by J. Ridgway 169 Piccadilly Mar. 1. 1837

LILIUM speciósum.

The Crimson Japan Lily.

HEXANDRIA *MONOGYNIA.*

Nat. Ord. LILIACEÆ.
LILIUM. Suprà, vol. 2. *fol.* 132.

L. *speciosum;* caule erecto ramoso glabro, foliis sparsis ovato-oblongis nervosis petiolatis, ramis unifloris, flore cernuo reflexo, corollis revolutis intus papilloso-barbatis. *Morren Notice sur un Lis du Japon, p.* 2.
L. speciosum. *Thunb. in act. linn.* 2. 332. *Willd. sp. pl.* 2. 86. "*Encycl. regn. veg. pars.* 1. *t.* 1. *Horticulteur Belge, March* 1833, *t.* 1."
L. superbum. *Thunb. fl. jap.* 134.
Kasbiako vulgò Konókko Juri. *Kæmpf. amæn.* 871. *Banks ic. Kæmpf. t.* 47.

All the Lilies previously seen in Europe, however beautiful they may be, are quite thrown into the shade by this glorious species, for which we have to thank Dr. von Siebold, who introduced it to Holland from Japan. Not only is it handsome beyond all we before knew in gardens, on account of the clear, deep rose-colour of its flowers, which seem all rugged with rubies and garnets, and sparkling with crystal points, but it has the sweet fragrance of a Petunia. Well might Kæmpfer speak of it as "flos magnificæ pulchritudinis," for surely if there is any thing not human, which is magnificent in beauty, it is this plant.

Beyond its own country it has no rival; but in Japan there are others that will scarcely yield even to it. Kæmpfer tells us of the *Oni Juri,* or Devil's Lily, with a showy flower, a span in breadth, the flowers all stained and mottled with crimson and purple, and minium; of the *Fime Juri,* a dwarf species, daggled with marks of blood, its purple flowers moreover spotted with crimson; and of the *Fi Juri,* or Fiery

Lily. Can these be among the twenty species of Lily which Dr. von Siebold is said to have brought alive from Japan to the Botanic Garden of Ghent?

Kæmpfer learned that the Japanese had obtained this species from Corea; Thunberg saw it about Nagasaki and elsewhere, but cultivated.

In the gardens here it has obtained the wrong name of L. lancifolium, which is a different species. Several accounts of it appear to have been published in Belgium, it having flowered at Ghent so long since as August, 1832, under the care of the late excellent gardener, Mr. Mussche; the only account that I am acquainted with is that by Professor Morren, where a detailed description will be found.

The accompanying drawing, by Miss Drake, was made in the nursery of the Messrs. Rollisson of Tooting, in August last.

I presume it requires the same treatment as Lilium japonicum and longiflorum, which flower beautifully every year, if planted in good light loamy soil, in a glazed pit, where they are protected from wet and severe cold in winter.

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* MARTÝNIA diándra.

Diandrous Martynia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. PEDALIACEÆ.
MARTYNIA. Suprà, vol. 11. *fol.* 934.

M. *diandra*; caule ramoso, foliis oppositis cordatis dentatis, floribus diandris. *Willd. sp. pl.* 3. 263.
M. diandra. *Gloxin. obs. p.* 14. *t.* 1. *Jacq. hort. Schönbr.* 3. *p.* 21. *t.* 289.
M. angulosa. *Lamarck encycl.* 2. 112.

A tender annual, inhabiting the neighbourhood of Vera Cruz, and long ago introduced to this country, although now seldom seen. It grows from two to three feet high, has a pallid appearance, and is covered all over with long soft hairs, tipped with a glutinous exudation. The flowers, which grow in short racemes from the axil of the leaves, are a most delicate pink fading to white, with the tips of the lobes of the corolla deeply stained with crimson; moreover, a bright yellow broken streak passes down the tube of the corolla from the middle of the lip. The calyx, which is pale green, is enveloped in two oval, concave, delicate, membranous, pink bractlets, and springs from the axil of a stalked wedge-shaped bract of the same texture and colour.

Altogether it is a pretty plant and worth cultivation, notwithstanding a somewhat unpleasant smell emitted by the

* Named by Houstoun in compliment to his friend Mr. John Martyn, Professor of Botany at Cambridge, and the father of the gentleman who filled the same chair for so many years, without performing any other duty than that of receiving his salary.

leaves when pressed. It differs from Martynia not only in the presence of the two membranous bracts already mentioned, but also in two of its stamens being abortive; nevertheless, as I see no particular necessity for separating it on these accounts, I leave it in the genus where it has hitherto stood.

The drawing was made in September, 1836, from a plant raised by Mr. George Mills, in the garden of the late Mr. Rothschild at Gunnersbury. It requires the treatment of a cockscomb, or any similar tender annual.

Fig. 1. shews the form of the ovary, style and stigma; 2. is a cross section of the ovary, representing the two double revolute parietal placentæ; and fig. 3. exhibits the two perfect stamens, the two imperfect ones, and the fifth, which is only rudimentary, all growing from the tube of the corolla.

Miss Drake del. Pub. by J. Ridgway & Sons, 169 Piccadilly

* TECÓMA jasminoídes.

Jasmine-leaved Tĕcoma.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. BIGNONIACEÆ.
TECOMA. *Suprà, vol.* 13. *fol.* 1117.

T. *jasminoides;* foliis pinnatis 2-jugis foliolis ovatis glabris nitidis, racemis terminalibus densis paniculatis, corolla tubuloso-campanulata limbo plano subæquali pubescente laciniis rotundatis undulatis.
Bignonia jasminoides. *Hort.*

This charming greenhouse climbing shrub is an evergreen, not uncommon in collections, but so seldom flowering, that it was only in August last I heard for the first time of its blossoms having been formed in Messrs. Chandler's nursery. From these the drawing was made, and subsequently a plant from the same collection obtained a medal at one of the Horticultural Society's meetings in Regent Street.

It is said to be a native of New Holland, and to have been originally received at the Royal Gardens at Kew; but I find no trace of it in books, and, in fact, have had no opportunity of examining the plant, except in a very cursory way.

The tendency to produce a flower with six segments to the corolla, instead of five, is remarkable, but probably accidental.

* An improvement upon the Mexican name *Tecomaxochitl*, applied to one of the species.

Tecoma australis seems to be the species to which this approaches the most closely; but the plant now figured is far more beautiful, and must, in fact, be considered one of the finest of its handsome race.

* PHILADÉLPHUS speciósus.

Showy Syringa.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. PHILADELPHACEÆ.
PHILADELPHUS. *Suprà, vol.* 7. *fol.* 570.

P. *speciosus;* foliis ovatis rariùs ovali-ovatis longè acuminatis argutè serrato-dentatis subtus pubescenti-hirtis, floribus ternis solitariisque, calycis lobis longissimè acuminatis, stylo profundè quadrifido, stigmatibus stamina superantibus. *Schrad. in DC. prodr.* 3. 206.

This beautiful genus, common as it is in gardens, is but imperfectly known even to Botanists, and to cultivators so little, that it is hardly possible to procure the species, as defined by Professor Schrader, with certainty from the nurseries, unless from Messrs. Loddiges. In one case, indeed, I have reason to believe, that an American species has been palmed upon the public as Deutzia grandiflora.

And yet there is no doubt that, whether species or not, the different forms of Philadelphus ought to be carefully distinguished; for they are extremely dissimilar in the size, colour, odour and abundance of their flowers, and in their whole manner of growth. That which is now figured is, for instance, called P. grandiflorus where it is known at all; but neither of the plants, otherwise called by that name, can be compared with it for beauty. One of them, already figured at fol. 570. of this work, under the name of P. grandiflorus, is smaller flowered, more cream-coloured, and a far more

* A classical name of some doubtful shrub. The application of the term is unknown; it literally means friendly brother.

robust plant, and yet is altogether inferior in beauty; it is the P. verrucosus; another is P. latifolius; while the true P. grandiflorus has rarely been marked with its proper name.

The species now represented, is a hardy shrub, growing in the garden of the Horticultural Society, to the height of eight or ten feet, and by no means stiff or formal, but with gently bending branches, loaded with snow-white flowers of the largest size, and scentless. It is among the least common of the genus, although much the handsomest. I propose to figure the others by degrees, and as the task of doing so is proceeded with, the distinctions between these plants will be more apparent than any thing that could be here said would render them now.

The dissection shews the degree of division of the style and the form of the stigmas, and the proportion they bear to the stamens.

2004

S. Watts sc.

* CANNA Reévesii.

Mr. Reeves's Indian Shot.

MONANDRIA *MONOGYNIA.*

Nat. ord. MARANTACEÆ.
CANNA. *Suprà, vol.* 7. *fol.* 576.

C. *Reevesii;* foliis ovato-lanceolatis acutis lætè viridibus, racemis paucifloris, bracteis ovatis ovario brevioribus, corollæ laciniis exterioribus ovato-lanceolatis concavis reflexis tubi longitudine interioribus patentibus: duabus semi-lanceolatis apiculatis alterâ obcordatâ undulatâ cuspidatâ, filamentis duobus corollæ laciniis majoribus erectis: sterili maximo obcordato undulato fertili minore semi-oblongo obtuso apice reflexo, stylo spathulato hinc angulato.

A most beautiful species of Canna, drawings of which were long since sent to England from China; and of which seeds have been at length procured by Mr. Reeves, to whom we owe so many of the finest Chinese plants now in the gardens of Europe.

It is very near C. flaccida; so very near that it may be doubted whether it is distinct. I have not been so fortunate as to see that plant, and therefore I judge of it entirely from Redouté's figure and description, which, if they are to be depended upon, shew that the leaves of this species are much shorter and less glaucous, and the inner petals distinctly cuspidate and unequal, instead of being obtuse and equal.

As to Canna glauca, I cannot conceive how any Botanist could have imagined it to be the same as C. flaccida; it is unnecessary to compare that species with this.

* See folio 1231.

The flower here represented was produced in a stove in the Garden of the Horticultural Society in May last; but I have no doubt that a greenhouse would suit the species equally well.

Nothing is more difficult than to understand the definitions of the species of Canna in Botanical books, owing to the vagueness with which the parts of the corolla are spoken of. It should always be borne in mind that a flower of this genus consists of four series of organs, each of which ought to be defined separately, and which are explained by the diagram No. 4. in the accompanying plate. The first row represents the calyx, the second the outer limb of the corolla, the third the inner limb of the corolla, and the fourth the stamens, of which two only are present, both petaloid, and one only bearing the anther. If these circumstances were attended to, in describing Cannas, the species would be distinguished upon much more intelligible differences than they now are.

Fig. 1. is the apex of the style; 2. a transverse section of the ovary; 3. the apex of the petaloid filament, with the anther upon one edge.

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* CIRRHÆA obtusáta.

Blunt-petalled Cirrhæa.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.
CIRRHÆA. Suprà, vol. 18. *fol.* 1538.

C. *obtusata;* foliis oblongo-lanceolatis utrinque acuminatis, petalis sepalisque lineari-oblongis obtusiusculis planis, labelli lobo medio obovato acuto inflexo latè unguiculato lateralibus acuminatis.

This species of Cirrhæa appears distinct from any of the others yet described. It is a good deal like *C. fusco-lutea,* for which I at first mistook it; but it seems sufficiently distinguished by its much more obtuse petals and smaller flowers. I am, however, far from being satisfied with the goodness of such distinctions among these plants, and am rather inclined to fear that we sometimes trust them too much. I believe, however, the form of the middle lobe of the lip to be essentially different in this species from all, except one which flowered in Messrs. Loddiges' collection in March last, and which I then named *C. pallida.*

That plant had most of the characters of *C. obtusata,* except that the sepals and petals were acuminated, and the middle lobe of the labellum placed on a slender unguis. The real value of these distinctions must remain for future enquiry.

* See folio 1538.

This *C. obtusata* was sent me from Liverpool, in September 1836, by Richard Harrison, Esq. who had received it from Mr. Moke of Rio de Janeiro; it had been collected by that gentleman at Tejuca.

* ONCÍDIUM deltodíeum.

Triangular-lipped Oncidium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ, § VANDEÆ.
ONCIDIUM. *Suprà, vol.* 13. *fol.* 1050.

§ 1. Sepala lateralia libera.

*** Labelli laciniæ laterales intermediâ majores.

O. *deltoideum;* pseudobulbis oblongis compressis sulcatis 2-3-phyllis, foliis lineari-lanceolatis canaliculatis, scapo paniculato ramis multifloris flexuosis divaricato, sepalo supremo unguiculato obovato lateralibus longioribus spathulato-lanceolatis apice revolutis, petalis latioribus obovatis crispis, labello deltoideo angulis rotundatis, cristâ tuberculatâ serie subduplici tuberculorum juxta basin et quatuor versus apicem majoribus distinctis biseriatis minore interjecto, columnæ alis maximis acinaciformibus.

O. deltoideum. *Suprà, vol.* . *fol.* .

Omnes partes virides leviter glaucescentes. Panicula *secunda, nutans, in apice scapi sesquipedalis. Sepala et petala lutea. Labellum apice acutiusculum reflexum. Crista e tuberculis brevibus oblongis composita, ferè totum discum labelli occupans; tubercula baseos interiora in circulum confluentia unico centrali magis prominulo, exteriora in lineas duas interruptas divergentes ordinata; ultra hæc versus apicem adsunt unum oblongum in ipso apice circuli et utrinque duo alia majora patentia et magis versus apicem tendentia: Circulus et tubercula exteriora pallide flavescunt maculis quibusdam sanguineis interjectis. Alæ columnæ, in planta culta integerrimæ, in spontanea denticulis quibusdam marginantur.*

I was very unexpectedly gratified at finding this rare plant a few weeks since flowering in the greenhouse of Wm. Joseph Myèrs, Esq. of Aighburgh, near Liverpool. It had been sent him from Lima by John Maclean, Esq. a great friend to science, now resident in that distant station. Mr. Maclean probably received it from Mr. Mathews, who first

* See folio 1050.

discovered it in the province of Chacapoyas in Peru, and from one of whose specimens, without a number, I had previously described it. The arrival of this species in a living state should be a fresh stimulus to those who have mercantile relations with Peru, to procure Orchidaceous plants from the west side of the Cordilleras, for many of them, especially those from the valley of Lloa, are of singular beauty. Hitherto scarcely any of them have found their way into our gardens.

I believe that Mr. Myers and Mr. Richard Harrison are at present the only possessors of this species, which is very graceful and pretty.

O. deltoideum is nearly related to O. divaricatum, from which its narrow leaves and differently formed labellum sufficiently separate it. To the little known O. macranthum, from Guayaquil, with flowers three inches across, it is also closely allied; but the hastate labellum and peculiar crest of that plant are, independently of the many other circumstances, satisfactory distinctive characters.

It may be expected that this species will grow well with the heat of a greenhouse. I found it among a general collection of greenhouse plants in Mr. Myers's garden, and it was in such good health that I can hardly doubt its preferring the cool temperature in which Cape and New Holland plants thrive, to the excessive heat and damp to which Orchidaceæ are commonly subjected.

Miss Drake del. Pub by J. Ridgway 169 Piccadilly Dec 1 83

2007

* COSMUS tenuifolius.

Fine-leaved Cosmus.

SYNGENESIA *SUPERFLUA.*

Nat. ord. ASTERACEÆ, § SENECIONIDEÆ.

COSMUS, Cav. *Capitulum* multiflorum, radiatum, ligulis neutris. *Involucrum* duplex, utrumque squamis 8-10 basi plus minus concretis apice acuminatis. *Receptaculum* planum paleaceum, paleis membranaceis in filum elongatum productis. *Styli* rami apice incrassati, hispidi, in conum subulatum producti. *Antheræ* apice appendice scariosâ cordatâ superatæ. *Achænium* tetragonum, exalatum, rostratum, et interdùm stipitatum, aristis 2-4 retrorsùm piloso-scabris deciduis coronatum.——Herbæ Americanæ *annuæ, glabræ, aut vix pilosulæ, elatæ, romosæ.* Folia *bipinnatisecta, lobis linearibus, lanceolatis, sæpius margine integerrimis.* Capitula *ad apices ramorum longè nudorum solitaria.* Discus *intensè luteus.* Radius *versicolor.* DC. prodr. 5. 607.

C. *tenuifolius ;* glaberrimus, foliis bipinnatisectis, lobis linearibus remotis acutissimis integris lobatisque, involucri exterioris squamis ovatis acuminatis, achæniis asperis rostratis muticis vel 1-triaristatis.

Herba Cosmi bipinnati *sed magis laciniata et tenuior.* Ligulæ *cuneatæ, erosæ, roseæ, subtùs pallidæ, unciam longæ.* Flosculi disci *lutei,* antheris *atris.* Corolla *bis strangulata, parte inferiore tereti, intermediâ inflatâ, supremâ urceolatâ.* Achænia *teretia, aspera, nunc rostrata mutica, nunc suberostria ; aristis* 1-3, *quarum unica retrorsùm serrata, coronata.*

A beautiful annual Mexican plant, not unfrequently raised from imported seeds, but always flowering so late in the year that it is unable to ripen seed and perishes. It grows from a foot and a half to two feet high, and is a most striking object when its rich purple flowers are well contrasted with the bright fennel-like leaves.

It differs from *C. bipinnatus* in the leaves being still more finely cut, the outer leaflets of the involucrum less acuminate,

* From κοσμος *beautiful,* in allusion to the appearance of the species.

and the fruit scabrous with a longer beak, which, in the outer florets of the disk, has no aristæ.

The drawing was made in the garden of the Horticultural Society, where it had been raised from seeds presented by George Frederick Dickson, Esq. F.H.S. It is hardly likely to be preserved over the winter. The only way to keep it in our gardens will be to raise it so early as to enable it to ripen its seeds before the close of the autumn.

The right hand figures, on the accompanying plate, represent different states of the pappus: those on the left are the involucrum, a highly magnified floret of the disk without pappus, and the point of one arm of the stigma.

Miss Drake. del.

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* STERNBÉRGIA colchiciflóra.

Meadow Saffron-flowered Sternbergia.

HEXANDRIA *MONOGYNIA.*

Nat. Ord. AMARYLLIDACEÆ.

STERNBERGIA, W. & K. *Spatha* hypogæa, apice petaloidea. *Perianthium* semisubterraneum, regulare, infundibulare, revoluto-patens. *Stamina* distincta, alternè longiora; *filamenta* conniventia, basi dilatata; *antheræ* oblongæ, innatæ. *Stigma* trilobum, bilabiatum: lobis duobus deflexis, altero erecto. *Capsula* epigæa, pericarpio molli succulento lateraliter dehiscente; *semina* nigra, nitida, punctis elevatis scabra, hilo carnoso tumido albo.——Flores *autumnales;* folia *verna.*

S. *colchiciflora;* foliis linearibus viridibus obtusis, limbo tubi longitudine, petalis quam sepala angustioribus et brevioribus, floribus suaveolentibus.

S. colchiciflora. *Waldst. et Kit.* 2. 172. *t.* 159. *Bieb. fl. taur. cauc.* 1. 261. *Herbert Amaryllid. ed.* 2. 187.

Narcissus autumnalis minor. *Clus. hist.* 1. 164.

A charming little autumn-flowering bulbous plant, recently introduced by the Hon. W. F. Strangways, who cultivates it without difficulty in his rich garden at Abbotsbury, in Dorsetshire.

Marschall v. Bieberstein describes it as perfuming the fields of the Crimea, especially about the Bosphorus, with its fragrant jasmine-scented flowers, in the months of September and October. Waldstein and Kitaibel speak of it as inhabiting dry, exposed, calcareous mountains at Buda-Ors, Palota, and Füred, in Hungary. These authors add that after the fruit is ripe the leaves wither, and the plant will

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* So called in compliment to Count Caspar v. Sternberg, a learned Botanist, and one of the most liberal and zealous promoters of that science.

not flower in the autumn of the same year, but remains altogether torpid till the autumn of the succeeding year.

I do not know what degree of cold this plant will bear without injury: but considering how rare it at present is, the wiser plan will be to treat it as a frame-bulb, unless in the mildest parts of the country.

2009

Miss Drake del.   Pub. by J. Ridgway 169 Piccadilly Decr. 1 1837

* HIBISCUS lilacinus.

Lilac Hibiscus.

MONADELPHIA *POLYANDRIA.*

Nat. ord. Malvaceæ.
HIBISCUS. *Suprà, vol.* 1. *fol.* 29.

§ XI. Lagunaria. Involucellum subnullum, nempè reductum ad marginem prominentem subintegrum dentatumve, aut 1-phyllum deciduum. *DC. prodr.* 1. 454.

H. *lilacinus* ; glaber, foliis integris tripartitisque filiformibus vel trifidis parenchymatosis : laciniis lineari-lanceolatis acuminatis in inferioribus pinnatifidis grossè dentatis, involucello obsoleto aut 6-partito laciniis subulatis, calycis laciniis acuminatis tricostatis tubo duplò longioribus, corolla infundibulari calyce duplo longiore, stigmate clavato indiviso.

Caulis *orgyalis, glaber, teres.* Folia *in plantâ spontaneâ filiformia, in cultâ dilatata.* Involucelli *dentes in spontaneâ subulati cultâ obsoleti.*

A beautiful new Hibiscus, obtained from seeds sent home from Swan River by Sir James Stirling, and raised with his usual skill and success by Mr. Robert Mangles, to which gentleman I am indebted for a wild specimen from Swan River. The latter is so little like the garden plant that, under other circumstances, I should have hesitated to consider them the same, for the leaves are filiform instead of being flat and broad as in the figure, while the involucellum, which can hardly be said to exist at all in the garden plant, consists of six distinct subulate teeth in the spontaneous specimen.

In some respects this approaches the *H. hakeæfolius* of

* See folio 1463.

Giordano, but it appears to belong to a different section of the genus.

It will doubtless be hardy in the summer, and will probably succeed better if planted in the open ground; but it will have to be protected in winter.

Drake del. ... Piccadilly ...

* ANŒCTOCHÍLUS setáceus.

Fringed Anœctochilus.

GYNANDRIA *MONANDRIA.*

Nat. ord. Orchidaceæ, § Neotticeæ.

ANŒCTOCHILUS, Blume. Perianthium ringens. *Sepalum* supremum cum petalis in galeam agglutinatum; lateralia patula, basi inæqualia labello supposita. *Labellum* cum columna basi connatum, ventricoso-calcaratum, ungue rigido canaliculato inflexo fimbriato, limbo bilobo patente. *Columna* brevis, marginibus membranaceis dilatatis involutis appendiculam bilamellatam simulantibus. *Stigma* basi bicallosum. *Pollinia* 2, pulverea, subbiloba, caudiculis brevibus, glandulâ oblongâ.——Herbæ *tropicæ, Asiaticæ, radice fibrosâ,* rhizomate *filiformi subterraneo.* Caules *foliosi.* Folia *nervosa, discolora, venis sæpè auromicantibus.* Flores *spicati, laxiusculi, glanduloso-pilosi.* (Anæctochilus, *Blume Prefat. fl. jav.* vi. *sec. Endlicher. gen. pl. no.* 1569. Anecochilus, *Blume Bijdr.* 411. *f.* 15. Chrysobaphus, *Wallich fl. nep. tent. t.* 17. " Orchipedum, *Kuhl & Hasselt Orchid. ed. Breda, t.* 10." *sec. cl. Endl.*

A. *setaceus;* foliis ovatis vel ovalibus acutis discoloribus, spicâ sub-4-florâ sepalisque exterioribus pubescentibus, labello infernè ad margines setaceo-multifido, sacco labelli subdidymo. *Blume Bijdr.* 1. 412.

This extremely curious plant is a native of damp, shady places, among stones, on the mountains of Java, and of similar situations in the woods of Ceylon, whence it was sent to the Duke of Northumberland, in whose collection at Syon it flowered in June last, soon after its arrival.

It, or a nearly related species, is included by Rumf among his most alpine Amboyna plants, " ubi nebulosis nubibus adeo cincti sumus ut ipsa meridie vix sol dignosci possit, qui nor perpetuò fluens cum frigore perpetuo quam maxime de-

* Apparently from ἀνοικτὸς open, and χεῖλος a lip, I presume in allusion to the spreading apex of that organ.

lassat et horridum reddit prætereuntem." He says, it always grows in the highest and most inaccessible mountains, where the scattered trees just afford it a little shade, and where the soil is but scantily supplied with moisture. He adds that it is called by the natives *Daun petola*, or Petola leaf, on account of its resemblance to the Petola, a precious silken vestment of many gaudy colours.

The beauty of the plant consists in this character, for its flowers are white and green, and very inconspicuous. But the leaves are singularly painted with golden veins upon a brownish purple ground, as if, in the words of Rumf, "some cunning painter had traced them over with unknown characters."

The plant will require the same treatment as Goodyera, Hæmaria, Spiranthes, Pelexia, and other terrestrial Orchidaceous plants of the same division of the order.

I have it from Mr. Macrae, and Sir W. Hooker from Mrs. Walker, from Ceylon.

Fig. 1. represents a flower after the sepals and petals have been cut off; 2. the column with the curious involute membranous margin; 3. the same unrolled and seen in a front view.

Miss Drake del. Pub by J. Ridgway 169 Piccadilly Dec. 1. 1837. J. Watts sc

* SPIRÆA barbàta.

Bearded Meadow-sweet.

ICOSANDRIA *DI-PENTAGYNIA.*

Nat. ord. Rosaceæ.
SPIRÆA. *Suprà, vol.* 16. *fol.* 1365.

S. *barbata;* foliis biternatis pinnatis subbijugis: foliolis biserratis oblongis acuminatis lateralibus semper basi cordatis terminalibus sæpè basi cuneatis, petiolis petiolulisque basi barbatis, paniculâ pubescente, floribus glabris decandris digynis bibracteolatis.
S. barbata. *Wall. cat. no.* 705.
S. japonica. *Hort.*

Herba *verosimiliter* 3-4-*pedalis, pilosa, caule solido medullâ spongiosâ farcto.* Folia *pedalia et ultrà.* Panicula 1½-2 *pedes longa, stricta, ramis gracillimis nutantibus; purissimè nivea, alabastris tantum virescentibus.* Carpella 2, *semi-infera, polysperma, apice recta parallela.* Stamina 10, *perigyna, toro nullo conspicuo.* Capsula *ovata, glabra, castanea, semibivalvis, calyce persistente longior.*

This is beyond all comparison the handsomest herbaceous Spiræa yet in our gardens; for to all the pure and brilliant whiteness of *S. filipendula*, it adds the graceful plume-like appearance of the American *S. Aruncus.* It was originally discovered in Nepal, Gossain Than, and Kamaon, by Dr. Wallich, and has been since introduced to Europe from Japan by Dr. von Siebold, so that, like some other Himalayan plants, it ranges to the most eastern limits of Asia.

The accompanying drawing was made from a small plant sent from the garden of Wm. Harrison, Esq. of Cheshunt,

* See folio 1365.

by his intelligent gardener, Mr. Pratt, who informs me that it was imported from Holland by Messrs. Low and Co. Mr. Pratt kept the plant in a pot in a cold frame, which accounts for its small size. When in its natural state it grows from three to four feet high, and the snow-white plume of flowers is alone two feet long. I have no doubt that it is perfectly hardy.

The name of bearded has been well applied to this species by Dr. Wallich, in allusion to a cluster of long stiff hairs which forms at the base of every petiole, both principal and secondary. This peculiarity is represented in the plate: but when the plant attains its natural dimensions the bearded character becomes much more conspicuous.

Fig. 1. is a flower magnified; fig. 2. is a section of the ovary lengthwise, shewing the insertion of the stamens, and the absence of a torus.

Miss Drake. del.   Pub by J. Ridgway 169 Piccadilly Dec. 1. 1837.

* ANIGOZANTHUS Manglesii, *var.* angustifolia.

Narrow-leaved Manglesian Anigozanthus.

HEXANDRIA *MONOGYNIA.*

Nat. ord. Hæmodoraceæ.

ANIGOZANTHUS, Labill. Perianthium superum, coloratum, tubulosum, lanatum pilis ramulosis, limbo 6-fido, laciniis subæqualibus sursùm secundis; tardiùs deciduum. *Stamina* 6, fauce inserta, adscendentia. *Antheræ* erectæ. *Ovarium* triloculare, loculis polyspermis. *Stylus* filiformis, deciduus. *Stigma* simplex. *Capsula* trilocularis, apice dehiscens. *Semina* numerosa. ——Herbæ *perennes.* Radix *fasciculato-fibrosa, fibris crassis.* Caulis *integer v. supernè divisus.* Folia *ensiformia, aversa, basibus semivaginantibus.* Flores *subcorymbosi, e spicis brevibus, bracteis suboppositifloris.* R. Br. prodr. 157.

A. *Manglesii;* foliis sparsè ciliatis acutissimis, caule lanato, racemo simplicii paucifloro, perianthio subtùs fisso limbo revoluto unilaterali, antheris muticis.
A. Manglesii. *D. Don in Sweet's Flower Garden, n. s.* 3. 265.
Var. *angustifolia;* foliis linearibus acuminatissimis.

Pili omnes plumosi, marginibus foliorum rari, sparsi, caule perianthioque densissimè intertexti, lanam tacta subasperam constituentes. Perianthium *aut virens unicolor, aut basi rufoaurantiacum, limbo æquali sexdentato replicato, tubo ad basin usque subtus fisso, intus glabrum, nisi in fundo ubi papillis horret numerosissimis carnosis apice pilosis.* Ovarium *oblongum, omninò inferum 3-loculare;* ovula *placentæ centrali adhærentia, numerosissima in apice funiculi dolabriformis verticalis inversa, foramine basin ovarii spectante.*

A very distinct variety of the beautiful A. Manglesii, obtained like its prototype from Swan River by Mr. Mangles, through the good offices of Sir James Stirling. It differs from the broad-leaved form of the species in having very narrow leaves, and somewhat smaller flowers which are

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* From ἀνίσχω *I raise up*, and ανθος *a flower;* but with what application is not evident.

either coloured reddish orange at the base as in this figure, or of one uniform green.

Like the other species of this handsome genus this is exceedingly easy to cultivate, if care be taken that the soil in which it is grown contains a small portion of chalk mixed with loam and peat. The plants are not very tender, living near London with the protection of a frame in winter; and would no doubt thrive well in some of the sheltered gardens in the mild southern climate of Great Britain.

Nothing can be more beautiful than the feathery hairs of all the species in this genus; they form striking microscopic objects. Fig. 1. represents the ovary all covered with them; and at the same time its interior, together with the long slender style and the curious papillæ that line the base of the tube, are brought into view; 2. one of those same papillæ; 3. an ovule with its singular hatchet-headed stalk.

2013

* JASMÍNUM glaúcum.

Privet-leaved Jasmine.

DIANDRIA *MONOGYNIA.*

Nat. ord. JASMINACEÆ.
JASMINUM. Suprà, vol. 1. *fol.* 1.

J. *glaucum;* foliis oppositis ovato-lanceolatis mucronatis subcoriaceis subtriplinerviis, pedunculis terminalibus brevissimis trifloris, calycibus pilosiusculis laciniis subulatis, corollæ glabræ laciniis senis ovalibus planis.
J. glaucum. *Hort. Kew. ed.* 1. *p.* 9. *Vahl. enum.* 1. 30. *Ventenat. hort. cels. t.* 55.
J. ligustrifolium. } *Lamarck. encyl. l. s.*
Mogorium myrtifolium. }
J. africanum foliis solitariis, floribus vulgatiori similibus. *Commel. pl. rar. f.* 5.

An old inhabitant of our gardens, but now neglected for newer favourites. Nevertheless this Jasmine is sweet, pretty, easy to cultivate, and not growing more than five or six feet high, its slender branches are particularly well adapted to be wreathed round one of those moveable trellises which gardeners now employ with so much advantage for their tender climbers.

It is a native of the Cape of Good Hope, according to Thunberg as high as a man in Lange Kloof, by the great stream called Zonder End, and in the neighbourhood of Brederivier.

It is a hardy greenhouse plant, flowering all the summer long. The drawing was made in the garden of the Society of Apothecaries at Chelsea.

* See fol. 1409.

Fig. 1. is a view of a corolla cut lengthwise; 2. represents half a calyx, and ovary, together with the ovules, style, and stigma.

Pub by J. Ridgway 169 Piccadilly Decr 1. 1837 G Barclay sc

* LOBÉLIA heterophýlla.

Various-leaved Lobelia.

SYNGENESIA *MONOGAMIA.*

Nat. ord. Lobeliaceæ.

LOBELIA. Suprà, vol. 1. *fol.* 60.

L. *heterophylla;* glabriuscula, caule angulato simplici, racemo secundo, foliis crassiusculis: inferioribus dentato-pinnatifidis, superioribus linearibus integerrimis, corollæ labii inferioris laciniâ mediâ obcordatâ: lateralibus dimidiatis. *R. Br. prodr.* 420.

L. heterophylla. *Labillard. nov. holl.* 1. *p.* 52. *t.* 74.

This very beautiful half-hardy herbaceous plant was first sent me in September last, by Mr. J. Ingram, of Southampton. It had been raised by Mr. William Shenton, of Winchester, who received it from Van Diemen's Land, from his brother. It afterwards reached me from Mr. Veitch, of the Mount Radford Nursery, near Exeter, with a memorandum that the plant *had been hung up in the stove for more than a month without the least soil, and without ceasing to flower;* a very singular fact, and quite new in plants of this description. I have also been favoured with it by Mr. Mangles and others.

It is much the handsomest of the herbaceous Lobelias, as will be obvious from the accompanying plate. The flowers are of a particularly clear, rich blue, and so large as to produce a very rich and gay appearance, either when the plant

* See folio 1612.

is grown singly or in beds. The property of continuing to grow and flower after being gathered, renders it invaluable to those who grow flowers to decorate their sitting rooms.

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—— laciniosa	18	1478
—— missourica	17	1412
—— Russell's	18	1496
—— viscosa	18	1492
Pothos scandens	16	1337
Pratia begonifolia	16	1373
Primula venusta	23	1983
Prescottia colorans	22	1916
Prunus candicans	14	1135
—— dasycarpa	15	1245
—— japonica	21	1801
Psoralea orbicularis	23	1971
—— macrostachya	21	1769
Pultenæa flexilis	20	1694
—— rosmarinifolia	19	1584
—— subumbellata	19	1632
Purshia tridentata	17	1446
Pyrolirion aureum	20	1724
Pyrus angustifolia	14	1207
—— crenata	20	1655
—— Bollwylleriana	17	1437
—— grandifolia	14	1154
—— nivalis	17	1434
—— salvifolia	18	1482
Pyrus sinensis	15	1248
—— spuria	14	1196
Ranunculus creticus, var *macrophyllus*	17	1432
Raphiolepis rubra	17	1400
Reevesia thyrsoidea	15	1236
Rehmannia chinensis	23	1960
Renanthera coccinea	14	1131
Rhodanthe Manglesii	20	1703
Rhodochiton volubile	21	1755
Rhododendron Alta-clerense	17	1414
—— arboreum, var. *roseum*	15	1240
—— arboreum, var. *album*	20	1684
—— arboreum, var. *cinnamomeum*	23	1982
—— Cartons	17	1449
—— pulcherrimum	21	1820
Ribes cereum	15	1263
—— divaricatum	16	1359
—— inebrians	17	1471
—— niveum	20	1692
—— punctatum	26	1658
—— sanguineum	16	1349
—— setosum	15	1237
—— speciosum	18	1557
—— tenuiflorum	19	1574
Rondeletia odorata	22	1905
Rose Clare	17	1438
Rosa multiflora, var *platyphylla*	16	1372
—— Ruga	16	1389
—— sinica	23	1922
Rubus nutkanus	16	1368
—— roridus	19	1607
—— spectabilis	17	1424
Ruellia Sabiniana	15	1238
Russellia juncea	21	1773
Saccolabium papillosum	18	1552
Sagittaria angustifolia	14	1141
Salpiglossis atropurpurea	18	1518
Salvia angustifolia	18	1554
—— foliosa	17	1429
—— fulgens	16	1356
—— Grahami	16	1370
—— involucrata	14	1205
Sarcanthus guttatus	17	1443
Sarcochilus falcatus	22	1832
Sauroglossum elatum	19	1618
Scaphyglottis violacea	22	1901
Schizanthus pinnatus, var *humilis*	18	1562
—— retusus	18	1544
Scilla plumbea	16	1355
—— Cupaniana	22	1878
Scottia angustifolia	15	1266
—— dentata	15	1233
—— lævis	19	1652
Scutellaria alpina	18	1460
—— alpina, var *lupulina*	18	1493

	Vol.	Folium
Sedum Cepæa	16	1391
Selago Gillii	18	1504
Sempervivum villosum	18	1553
——— urbicum	20	1741
Senecio lilacinus	16	1342
—— Tussilaginis	18	1550
Serapias cordigera, var. *longipetala*	14	1189
Silene laciniata	17	1444
—— chloræfolia	23	1989
Sinningia villosa	14	1134
Sisyrinchium grandiflorum	13	1364
——— graminifolium, var. *pumilum*	22	1915
——— odoratissimum	15	1283
Solandra guttata	18	1551
Solanum crispum	18	1516
—— etuberosum	20	1712
Sollya heterophylla	17	1466
Sophora velutina	14	1185
Soulangia rubra	18	1498
Sparaxis pendula	16	1360
Spartium acutifolium	23	1974
Spermadictyon azureum	15	1235
Sphacele campanulata	16	1382
Sphærostema propinquum	20	1688
Sphenotoma capitatum	18	1515
Spiræa ariæfolia	16	1365
—— barbata	23	2011
—— chamædrifolia	15	1222
Spiranthes bracteosa	23	1934
Stachys albicaulis	18	1558
—— germanica, var. *pubescens*	15	1289
—— inflata	20	1697
—— Salviæ	15	1226
Stackhousia monogyna	22	1917
Stanhopea eburnea	18	1529
——— insignis	22	1837
——— oculata	21	1800
Stapelia Gussoneana	20	1731
Statice puberula	17	1450
Stemodia chilensis	17	1470
Stenactis speciosa	19	1577
Sterculia lanceolata	15	1256
——— Tragacantha	16	1353
Sternbergia colchiciflora	23	2008
Stigmaphyllon aristatum	20	1659
Stranvæsia glaucescens	23	1956
Streptocarpus Rexii	14	1173
Stylidium fasciculatum	17	1459
Syringa Josikæa	20	1733
Tabernæmontana densiflora	15	1273
Tacsonia pinnatistipula	18	1536
Talauma Candollii	20	1709
Tecoma jasminoides	23	2002
Tellima grandiflora	14	1178
Teucrium orchideum	15	1255
Thermopsis fabacea	15	1272
Thryallis brachystachys	14	1162
Tillandsia acaulis	14	1157
——— rosea	16	1357
——— stricta	16	1338
Trachymene cœrulea	15	1225
Tradescantia undata	17	1403
Trichocentrum fuscum	23	1951
Trichopetalum gracile	18	1535
Trichopilia tortilis	22	1863
Trifolium fucatum	22	1883
——— vesiculosum	17	1408
Trigonidium obtusum	23	1923
Tristania macrophylla	22	1839
Triteleia uniflora	23	1921
——— laxa	20	1685
Tritoma Burchelli	21	1745
Tropæolum pentaphyllum	18	1547
——— tricolor	23	1935
——— trachyceras	23	1926
Tulipa Oculus solis, var. *persica*	14	1143
——— Oculus solis, var. *præcox*	17	1419
——— scabriscapa	23	1990
Tupistra nutans	15	1223
Turræa pinnata	17	1413
Ulex genistoides	17	1452
Vaccinium ovatum	16	1354
Vanda teres	21	1809
Verbena Aubletia, var.	23	1925
——— Melindres	14	1184
——— multifida contracta	21	1766
——— sulphurea	21	1748
Vernonia axilliflora	17	1464
Veronica perfoliata	23	1930
Viburnum cotinifolium	19	1650
Villarsia reniformis	18	1533
Viola præmorsa	15	1254
Westringia longifolia	18	1481
Wigandia caracasana	23	1966
Xerophyllum setifolium	19	1613
Yucca Draconis	22	1894
——— flaccida	22	1895
——— superba	20	1690
Zephyranthes mesochloa	16	1361
——— Spofforthiana	21	1746
Zinnia violacea, var. *coccinea*	15	1294
Zygopetalum cochleari	22	1857

THE END.

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